

Docket No.: 048347-0015



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PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	:	Customer Number: 20277
Olaf VANCURA	:	Confirmation Number: 4544
Application No.: 10/643,429	:	Tech Center Art Unit: 3711
Filed: August 19, 2003	:	Examiner: William M. Pierce
For: SYSTEM AND METHOD FOR SURVEY-BASED BONUS GAME	:	

**TRANSMITTAL OF APPEAL BRIEF**

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith is Appellant's Appeal Brief in support of the Notice of Appeal filed August 18, 2005. Please charge the Appeal Brief fee of \$500.00 to Deposit Account 500417.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. 1.17 and 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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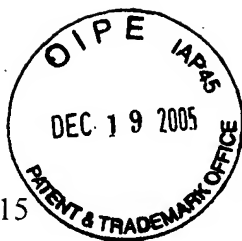
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Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed August 18, 2005, wherein Appellant appeals from the Primary Examiner's rejection of claims 1-17.

**I. Real Party In Interest**

This application is assigned to Mikohn Gaming Corporation by assignment recorded on August 11, 1999, at Reel 010169, Frame 0657.

**II. Related Appeals and Interferences**

The subject matter involved in this Appeal relates to the subject matter involved in U.S. Patent Application Serial No. 09/372,560 (the '560 application); U.S. Patent Application Serial No. 09/875,753 (the '753 application); and U.S. Patent Application Serial No. 10/189,721 (the '721 application). The present application, as well as the '753 and '721 applications, are

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continuation applications of the '560 application. Prior decisions by the Board of Patent Appeals and Interferences for both the '560 and '753 applications accompany this Appeal Brief and are included in the Related Proceedings Appendix. A copy of the Appeal Brief submitted in the '721 application is included in the Related Proceedings Appendix.

### **III. Status of Claims**

Claims 1 through 17, all pending claims, have been finally rejected. It is from the final rejection of claims 1 through 17 that this Appeal is taken.

### **IV. Status of Amendments**

No Amendment has been filed subsequent to the issuance of the Final Office Action dated May 18, 2005.

### **V. Summary of Claimed Subject Matter**

The present invention is directed to a novel casino game and method involving a survey-based bonus game combined with an underlying game of chance. A survey-based bonus game of the present invention is a knowledge-based game that uses actual input from a player, responsive to a survey question presented to the player during the survey-based bonus game (written description of the specification at page 8, lines 9-15). In other words, the casino game of the present invention utilizes a player's knowledge as part of the game play (written description of the specification at page 1, lines 3-5). One example of a slot machine combined with a survey-based bonus game, is described at page 23, line 24 through page 25, line 29. The casino game of the present invention tests a player's knowledge of surveys independent of a player's skill in a



game of chance (written description of the specification at page 3, lines 16-20). The concept of a survey-based bonus game combined with an underlying game of chance, as in the present claimed invention, is unknown to the applied prior art.

Independent claim 1 is directed to a method for playing a casino game comprising playing an underlying game of chance together with playing a survey-based bonus game. The method of claim 1 includes, in pertinent part, presenting a player a survey question and a plurality of responses to the survey question by a number of people surveyed, upon occurrence of an event in the casino game. At least one input is received in the survey-based bonus game from the player responsive to the presented survey question. A bonus award is paid to the player in the casino game. The value of the bonus award is at least a function of how many people in the number of people provided the at least one of the plurality of responses included in the input(s) received from the player. The bonus award is awarded separately from the underlying game of chance award.

Independent claim 5 is directed to a casino game comprising an underlying game of chance together with a survey-based bonus game. The casino game of claim 5 includes, in pertinent part, an initiation mechanism that triggers the play of survey-based bonus game in the underlying game of chance. A database is present and includes a plurality of survey questions, a plurality of responses for each survey question, and a number of people providing each of the plurality of responses for each survey question. One of the survey questions together with the responses is presented to the player in a display upon the triggering of the survey-based bonus game and the player will input a response to the survey question. A bonus award is payable to the player in the survey-based bonus game, separate from the award paid in the underlying game of chance.

Independent claim 10 is directed to a method for playing a casino game comprising playing an underlying game of chance together with playing a survey-based bonus game. The method of claim 10 includes, in pertinent part, presenting a player with a survey question and a plurality of accompanying survey responses from a database in the casino game upon the occurrence of a triggering event in the casino game. The plurality of accompanying survey responses includes at least one correct response and at least one bogus response. At least one input is received from the player responsive to the presented survey question and the at least one input includes at least one of the plurality of accompanying survey responses. This input by the player continues until either: (a) all correct responses are received in the casino game from the player, or (b) a bogus response is received in the casino game from the player, whichever of (a) or (b) occurs first. The player is paid a bonus game award in the casino game, and the bonus game award is paid separately from the game of chance award.

#### **VI. Ground of Rejection To Be Reviewed By Appeal**

Claims 1-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Demar (U.S. Pat. No. 6,203,429, hereinafter "Demar") in view of Walker (U.S. Pat. No. 6,193,606, hereinafter "Walker") and "Feud History" of the Family Feud, 2002 (<http://www.familyfeud.tv/history.html>) (hereinafter "Family Feud").

The Examiner's request under 37 C.F.R. § 1.105 for any and all known non-patent literature, published applications or patents that relate to the present claimed subject matter pertaining to Family Feud was revoked by Gregory M. Vidovich, Supervisory Patent Examiner (SPE) of Art Unit 3711. The Examiner's request under 37 C.F.R. § 1.105 was deemed improper,

as evidenced in the Interview Summary (PTOL-413) dated June 23, 2005. A copy of the Interview Summary is included in the Evidence Appendix.

## **VII. Argument**

### **Examiner's Argument**

The Examiner, at page 2 of the non-final Office action, dated October 20, 2004 ("non-final Office action"), asserted that Demar teaches a slot machine with a primary wagering game played in combination with a secondary bonus game. The Examiner stated that the bonus game in Demar is entered upon a predetermined occurrence (i.e. single event, combination of events or accumulation of desired events) in the primary wagering game. The Examiner admitted that Demar is silent as to disclosing a survey-based bonus game, as required in each of independent claims 1, 5 and 10. Nevertheless, the Examiner argued that Walker teaches that trivia-type bonus games are well known, and the Family Feud game is an example of a well known trivia game.

The Examiner, at pages 2-3 of the non-final Office action, concluded that one of ordinary skill in the art would have found it obvious to replace Demar's bonus mode with the Family Feud trivia game because it would be replacing one known game for that of another. The Examiner asserted that some showing of unexpected results or a particular solution to a problem must exist in order to be considered critical to the claimed invention.

The Examiner's rejection was maintained in the final Office action dated May 18, 2005 ("final Office action"). The Examiner concluded that the substitution of a trivia game for that of a secondary games in a bonus games is considered a mere substitution of one game activity for another and asserted that the present claimed invention performs and produces substantially the same results as the prior art, but for the requirements of a different secondary game. See page 2

of the final Office action. The Examiner argued that the mere changing of the theme of a game does not result in a new game. See page 2 of the final Office action.

### **Appellant's Argument**

Bonus games are conventional in the casino industry, but there remains room for improvements to existing casino games and bonus games. It is extremely rare for a new patent to claim other than a combination of old elements. As a general matter, "virtually all [inventions] are combinations of old elements." *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998) (quoting *Environmental Designs, Ltd. v. Union Oil*, 713 F.2d 693, 218 USPQ 865 (Fed. Cir. 1993)).

The designing of a successful knowledge-based game, such as a survey-based bonus game, in combination with an underlying game of chance, required negotiating and solving two formidable problems: (1) the game must award a player who correctly answers yet ensure the house commercial viability by preventing a perfect knowledge player or a team of players working together from cleaning out or bankrupting the house (page 18 of the written description, lines 5 through 8); and (2) the game must be fair to a player with no knowledge (such as a player guessing at answers), i.e., the game must not present a prohibitively high house advantage, because players must be encouraged to continue to play even if they are not always correct in their responses (page 17 of the written description, lines 1 through 4).

The present invention, unlike any of the three references applied by the Examiner, addresses and solves the first problem by providing a game which need not be monitored and need not monitor itself, because a set house advantage is established for the perfect player for playing the game (page 11 of the written description, lines 7 through 11, page 17, lines 20

through 24). The second problem is addressed and solved by providing a set house advantage for the player who always guesses at the answer, as provided by random number generator 50 in Fig. 1 and illustrated by the formulas and examples throughout the specification. The present invention provides an instantaneous house advantage in a predetermined range between the set limits of the perfect player and the player who always guesses, thereby preventing a perfect player from breaking the house because the house has a statistical house advantage that is preserved over time (page 17 of the written description, lines 20 through 24). However, the player who always guesses is assured a fair return under a second statistical house advantage that is preserved over time. Thus, the present invention provides an exciting new bonus game to players that provides separate awards and which varies in value as a function of how many people responded to a survey question.

The problems addressed and solved by the claimed invention merits consideration with regard to the nonobviousness issue. *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ2d 1333 (Fed. Cir. 1993); *In re Nomiya*, 509 F.2d 566, 184 USPQ 607 (CCPA 1975). It is well settled that all evidence impacting nonobviousness must be given consideration. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000); *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 42 USPQ2d 1378 (Fed. Cir. 1997); *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

Appellant would further argue as an indicium of nonobviousness the long-felt need and failure of others to find a solution to the problem of the perfect knowledge player. These unsuccessful attempts to solve the perfect knowledge player problem underscore the elegant sophistication of the present invention which is a self-contained machine that conforms to U.S. regulations requiring random events and encouraging players with limited knowledge while

protecting the house against a perfect knowledge player. *Ecolchem Inc. v. Southern California Edison, Co.* 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

In the present case, however, the Examiner has failed to establish where the applied references recognize the abovementioned problems, much less offer any solution to these problems. Nowhere in Demar, Walker of Family Feud is there a discussion that these problems needed to be solved, much less any discussion about solving such problems. The requisite motivation to support the ultimate legal conclusion of obviousness under 35 U.S.C. § 103 is not an abstract concept, but must stem from the applied prior art as a whole and have realistically impelled one having ordinary skill in the art to modify a reference or combine references to arrive at a claimed invention. *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989).

Appellant respectfully submits that the requisite motivation to combine Demar with Walker and Family Feud has not been established. It is submitted that the Examiner's proffered motivation for combination of the references (i.e. obvious to substitute one known game for another) is conclusory and legally insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a). Appellant, therefore, solicits the Honorable Board to reverse the Examiner's rejection of claims 1-17 under 35 U.S.C. § 103 for at least these reasons.

Appellant further submits that the Examiner's proposed modification of Demur with Walker and Family Feud amounts to nothing more than a judicially condemned "obvious to try" standard. *In re O'Farrell*, 853 F.2d 894, 7 USPQ2d 1673 (Fed. Cir. 1988); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988).

The Examiner has not made the requisite "clear and particular" factual findings as to any specific understanding or specific technological principle which would have realistically impelled one having ordinary skill in the art to modify the slot machine with bonus mode disclosed by Demar to arrive at the claimed invention. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000); *Ecolochem Inc. v. Southern California Edison, Co.*, 222 F.2d 973, 56 USPQ2d 1065 (Fed. Cir. 2000); *In re Kotzaab*, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.2d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The Examiner provides no factual basis to explain how the proposed modification would be implemented, but rather, only forces the combination of three references. The only apparent motivation is found in Appellant's disclosure, which, of course, can not be properly relied upon by the Examiner to support the ultimate legal conclusion of obviousness under 35 U.S.C. § 103. *Panduit Corp. v. Dennison Mfg. Co.*, 774 F.2d 1082, 227 USPQ 337 (Fed. Cir. 1985).

Demar discloses a basic gambling game such as video poker or reel-type slot machine play as the basic mode game. See Demar at abstract. If bonus symbols are selected in the basic mode game, a bonus mode game is triggered. See Demar at abstract. In the bonus mode the same or a different game is implemented. In other words, Demar discloses that a bonus game will occur when a random symbol occurs on the reel slot outcome in the basic mode game.

Moreover, as disclosed in Demar at col. 4, lines 7-11, the basic mode game can be any type of game of chance and will typically be a spinning reel slot machine, a video poker game or similar type of game suitable for wagering. In the basic game, some event, or sequence of outcomes which occur at a low frequency permits the playing of the bonus game. See Demar at col. 4, lines 11-13. The bonus game is another game of chance with a generally high hit rate (i.e., the probability that a player will win rather than lose). See Demar at col. 4, lines 13-16. In

contrast, each of independent claims 1, 5 and 10, requires an underlying game of chance combined with a survey-based bonus game. As clearly disclosed by Demar, both the basic mode game and the bonus game are games of chance. Demar neither discloses nor suggest a survey-based bonus game as required in the present claimed subject matter. The claimed invention provides a novel and non-obvious survey-based bonus game and, as admitted by the Examiner, one that is not found in Demar.

Walker does not teach a bonus game. Rather, Walker teaches that correct answers to trivia questions enhance reel slot payouts only when winning combinations occur in the play of the reel slots. In other words, Walker fails to teach a separate bonus game combined with an underlying game of game as with the present invention. Walker requires a player to answer a trivia question before each spin of a slot game completes (or in a predetermined time period thereafter). Indeed, Walker requires the spin reel button to be pushed (step 1112 in Figure 11A) before retrieving the next question from the database (step 1128 in Figure 11B). Every Walker spin displays another question. For those spins that do not randomly provide the player with a win in the reels, any correct answer to the displayed question is a waste of the player's time (and this happens often, see column 8, lines 50-55 for a discussion of 8,570 reel outcomes resulting in non-winning combinations out of 10,648 total combinations). But, when a winning combination is hit and a correct answer given, then an enhanced payout is provided. Walker's invention penalizes the player when the player incorrectly answers (the payout is reduced) so the player is encouraged not to guess (a non-answer results in a payoff). No such penalty is found in the present invention. Guessing in the present invention is encouraged as the player may guess an answer having a higher number of respondents answer. This is not a bonus game of the type claimed (i.e., upon the occurrence of a random bonus event as found in claim 1). In Walker, the



player must answer with every reel spin to be eligible for enhanced payouts. This is not the claimed invention.

Also, the claimed subject matter in each of claims 1, 5 and 10 recites that the bonus award is separate from the payoffs in the underlying game of chance and that the underlying game of chance ends when a winning combination is obtained therein. In each of independent claims 1, 5 and 10, the bonus award is separate from the awards in the slot game. Walker has no such teachings. Walker has no bonus game as every reel spin requires an answer to a question and only when the player wins in the reel spin does the answer modify the reel spin award either up if correct or down if incorrect (see Figure 10). Also, Walker, does not disclose a survey-based game, much less a survey-based bonus game, as required in each of independent claims 1, 5 and 10.

The Family Feud game was described in the Background of the Invention section of the present specification as a well known conventional consumer game show. Such conventional consumer games allow players to win money based upon their knowledge of the answer to a question, such as a survey question. The Examiner relied on an article found on the world wide web that provided the history of the nationally syndicated game of Family Feud, from its inception in the 1970's to 2002. Appellant fails to see the relevance of this historical summary of a television game show. Admittedly, the Family Feud game is a trivia game show with survey-based questions, but the Examiner has failed to establish why one of ordinary skill in the art would have been realistically motivated to modify the teachings of Demar and Walker to include a survey implement such a game.

The Examiner merely concludes that substitution for of a trivia type game for another would have been obvious. However, the factual inquiry whether to combine references must be

thorough and searching. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52 (Fed. Cir. 2001). It must be based on objective evidence of record. *In re Lee*, 237 F.3d 1338, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002); *In re Thrift*, 63 USPQ2d 2002, 2006 (Fed. Cir. 2002). “A showing of a suggestion, teaching, or motivation to combine the prior art reference is an ‘essential component of an obviousness holding’” *Brown & Williamson Tobacco Corp. v. Phillip Morris, Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000); quoting *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). The requisite fact-based motivation cannot be dispensed with by a generalized assertion, as the Examiner has done in the instant case. It is improper, in determining whether a person of ordinary skill would have been led to the asserted combination of references, simply to “[use] that which the inventor taught against its teacher.” *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983).

Moreover, in independent claims 1 and 5, the casino game pays the player a bonus award as a function of how many people answered each displayed answer in the presented survey question. As argued above, this is not taught by Demar or Walker. The Family Feud game suffers the same deficiency. In the Family Feud game, individual players of a family are pitted against individual players of another family. Thus, two families play against each other in the Family Feud game, but in the present invention, only a player inputs at least one answer. An individual player of a family in the Family Feud game does not get a choice of answers, but guesses an answer. Claim 10 provides a bogus answer in the presented answers. Bogus answers are not found as a selection in the Family Feud game, Demar or Walker.

There are no factual statements in the four corners of the rejection providing substantial evidence of a motivation to combine Demar with either Walker or the Family Feud history article. Walker only teaches enhancing (or reducing) winning payouts in a reel slot game by

requiring the player to play a simultaneous trivia game for every reel spin. Walker is not a bonus game as taught by Demar. As Demar emphatically states: "A principle feature of the present invention is the structure of the bonus game. A player must play the base game until he qualifies for the bonus game." See column 2, lines 17-20. Demar teaches away from Walker which provides the trivia question with every spin. The provision of trivia to enhance the payoffs cannot be substituted for the bonus game of Demar as there is no motivation to do so.

The patentability of dependent claims 4 and 11 is separately advocated. Dependent claims 4 and 11 recite "a value in credits equal to a number of a number of respondents" is not found in any reference cited. Ergo, even if the applied references are combined as suggested by the Examiner, and Appellant does not agree that a requisite fact-based motivation has been established, the claimed inventions would not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

In view of the foregoing, the rejection of claims 1-17 is not legally viable. Appellant, therefore, solicits the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103 for at least these reasons.

### **VIII. Conclusion**

Based upon the arguments submitted supra, Appellant submits that the Examiner's rejection under 35 U.S.C. § 103 is factually and legally erroneous. Appellant, therefore, solicits the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. 1.17 and 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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## **IX. CLAIMS APPENDIX**

1. (Previously Presented) A method for playing a casino game comprising:

receiving a wager from a player in the casino game to play an underlying game of chance and a survey-based bonus game;

playing the underlying game of chance in the casino game in response to receiving the wager;

paying the player, in the casino game, a game of chance award when the player wins during play of the underlying game of chance, the game of chance award at least based on the received wager;

ending the casino game in response to paying the game of chance award;

upon occurrence of a random bonus event in the casino game, presenting to the player in a display of the survey-based bonus game a survey question and a plurality of responses to said survey question by a number of people surveyed;

receiving at least one input in the survey-based bonus game from the player responsive to said presented survey question, said at least one input including at least one of said plurality of responses;

paying the player, in the casino game, a bonus award, the value of the bonus award at least a function of how many people in said number of people provided the at least one of said plurality of responses included in said at least one input received from the player, the bonus award awarded separately from the game of chance award; and

ending the casino game in response to paying the bonus award.

2. (Original) The method of claim 1 wherein said playing said underlying game of chance comprises playing a slot game.

3. (Previously Presented) The method of claim 1 wherein said presenting to the player in the display comprises:

presenting said question and said plurality of responses according to an output of a randomly set timer.

4. (Previously Presented) The method of claim 1 wherein said paying said bonus award comprises:

paying the player a bonus award having a value in credits equal to how many people provided said at least one response included in said at least one input from said player.

5. (Previously Presented) A casino game comprising:  
an underlying game of chance for play by a player of said casino game upon receiving a wager from said player;

a game of chance award in said underlying game of chance payable to said player when said player wins during said play of said underlying game of chance, the game of chance award at least based on the received wager;

a survey-based bonus game for play by said player upon being triggered in said underlying game of chance;

an initiation mechanism for triggering said play of said survey-based bonus game;

a database having a plurality of survey questions, a plurality of responses for each survey question, and a number of people providing each of the plurality of responses for each said survey question, one of said plurality of survey questions with its plurality of responses presented to said player in a display upon said triggering of said survey-based bonus game from said initiation mechanism;

at least one input to the survey-based bonus game from the player responsive to said displayed survey question with its plurality of responses, said at least one input including at least one of the displayed plurality of responses; and

a bonus award payable to said player in said survey-based bonus game, the value of said bonus award being a function of at least the number of people providing the at least one response corresponding to said at least one input from the player, said bonus award being paid separately from said game of chance award.

6. (Original) The casino game of claim 5 wherein the underlying game of chance is a slot game.

7. (Original) The casino game of claim 5 wherein said initiation mechanism is random.

8. (Original) The casino game of claim 5 wherein said initiation mechanism is a randomly set timer.

9. (Original) The casino game of claim 5 wherein said survey question and said plurality of responses pertain to sporting events.

10. (Previously Presented) A method for playing a casino game comprising:  
receiving a wager from the player in the casino game to play an underlying game of chance and a survey-based bonus game;

playing the underlying game of chance in the casino game in response to receiving the wager;

paying the player, in the casino game, a game of chance award when the player wins during play of the underlying game of chance, the game of chance award at least based on the received wager;

upon occurrence of a triggering event in the casino game, presenting the player, in a display, with a survey question and a plurality of accompanying survey responses from a database in the casino game, said plurality of accompanying survey responses including at least one correct response and at least one bogus response;

receiving at least one input to the survey-based bonus game from the player responsive to said presented survey question, said at least one input including at least one of said plurality of accompanying survey responses;

continuing said receiving until either:

(a) all correct responses are received in the casino game from the player, or

(b) a bogus response is received in the casino game from the player,

whichever of (a) or (b) occurs first; and



paying the player a bonus game award in the casino game, said bonus game award paid separately from said game of chance award.

11. (Previously Presented) The method of claim 10 wherein said paying said bonus game award comprises:

paying the player a bonus game award having a value in credits equal to a number of respondents providing said at least one correct survey response to the survey question that is included in said at least one input.

12. (Previously Presented) The method of claim 10 wherein said paying said bonus game award comprises:

paying the player a bonus game award fixed according to a rank of said at least one included correct survey response in said presented accompanying survey responses.

13. (original) The method of claim 10 wherein said presenting comprises:

presenting said survey question and said accompanying survey responses upon the occurrence of a random bonus event.

14. (Original) The method of claim 10 wherein said presenting comprises:

presenting said survey question and said responses upon an expiration of a randomly set time period.

15. (Original) The method of claim 10 wherein said playing said underlying game of chance comprises:

playing a slot game.

16. (Original) The method of claim 10 wherein said presenting comprises:

presenting a survey and a plurality of accompanying responses relating to sporting events.

17. (Original) The method of claim 10 further comprising storing said database in a computer memory.

**X. EVIDENCE APPENDIX**

Interview Summary (PTOL-413) dated June 23, 2005



# UNITED STATES PATENT AND TRADEMARK OFFICE

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10/643,429	08/19/2003	Olaf Vancura	1482/198( )	4544

23381 7590 06/28/2005

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EXAMINER

PIERCE, WILLIAM M

ART UNIT PAPER NUMBER

3711

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Interview Summary



Application No.

10/643,429

Applicant(s)

VANCURA, OLAF

Examiner

Gregory M. Vidovich

Art Unit

3711

All participants (applicant, applicant's representative, PTO personnel):

(1) Gregory M. Vidovich, SPE, Art Unit 3711.

(3) \_\_\_\_\_.

(2) Mr. Robert Dorr.

(4) \_\_\_\_\_.

Date of Interview: 23 June 2005.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: none.


Identification of prior art discussed: none.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Dorr was notified that the 105 request in the Office action mailed 5/18/05 has been revoked as this request was improper. The period for response continues to run from the 5/18/05 mailing date of that Office action.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

  
GREGORY VIDOVICH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**XI. RELATED PROCEEDINGS APPENDIX**

Prior decisions by the Board of Patent Appeals and Interferences for both U.S. Patent Application Serial No. 09/372,560 (the '560 application) and U.S. Patent Application Serial No. 09/875,753 (the '753 application) are attached hereto. A copy of the Appeal Brief submitted in U.S. Patent Application Serial No. 10/189,721 (the '721 application) is attached hereto.

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.



Paper No. 41

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte OLAF VANCURA

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Appeal No. 2004-0357  
Application No. 09/372,560

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ON BRIEF

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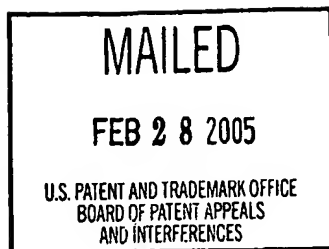
Before RUGGIERO, DIXON, and LEVY, Administrative Patent Judges.

DIXON, Administrative Patent Judge.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1, 2, 4-30, 42-47, 49-55, 57, 58, and 130-132, which are all of the claims pending in this application.

We REVERSE.





## BACKGROUND

The Appellant's invention relates to a knowledge-based casino game and method therefor. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method for playing a casino game comprising:

receiving a wager for the casino game,

playing an underlying game of chance in the casino game,

awarding payoffs when play of the underlying game of chance results in a winning combination,

playing a knowledge-based bonus game in the casino game using answers from a player when a bonus condition occurs in the underlying game, playing the knowledge-based game after playing the game of chance without any intervening game which would affect the payoff of the game of chance, the play of the knowledge-based game having a bonus payoff separate from the payoffs awarded in the play of the underlying game of chance so that the entitled payoffs are made for the underlying game regardless of the outcome of the knowledge-based game, the combined play of both the knowledge-based bonus game with the underlying game of chance over time having a house advantage for the casino game within a predetermined range, the predetermined range having set limits based on the correctness of the answers and the wager.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Thompson	5,178,545	Jan. 12, 1993
Keller, Jr. (Keller)	5,718,429	Feb. 17, 1998
Walker et al. (Walker)	6,193,606	Feb. 27, 2001
		(Filed Jun. 30, 1997)

Appeal No. 2004-0357  
Application No. 09/372,560

Evans	GB 2,197,974	Jun. 02, 1988
Claypole et al. (Claypole)	GB 2,262,642	Jun. 23, 1993

Claims 1, 2, 4-30, 42-47,<sup>1</sup> 49-55, 57, and 58 stand rejected under 35 U.S.C. § 102 as being anticipated by Walker. Claims 1, 2, 4, 9-30, 42-47, 49-55, 57, and 58 stand rejected under 35 U.S.C. § 102 as being anticipated by Claypole. Claims 1, 2, 4-7, 12, 13, 18, 42-46, 50, 55, 57, and 58 stand rejected under 35 U.S.C. § 102 as being anticipated by either Keller or, in the alternative, Evans. Claims 8-11, 14-17, 19-30, 47, 49, 51-54, 56, and 58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over either Keller or, in the alternative, Evans in view of Thompson. Claims 130-132 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Walker, Claypole, Keller or Evans in view of matters well known to mathematics and gaming.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 35, mailed May 16, 2003) for the examiner's reasoning in support of the rejections, and to appellant's brief (Paper No. 33, filed Feb. 24, 2003) and reply brief (Paper No. 36, filed Jul. 10, 2003) for appellant's arguments thereagainst.

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<sup>1</sup>We note that claim 47 remains on appeal, but has not been included in the appendix.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

In determining novelty, the first inquiry must be into exactly what the claims define. *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Similarly, a Section 103 analysis begins with a key legal question -- what is the invention claimed? *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987).

As our reviewing court states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002), cert. denied, 123 S.Ct. 2230(2003).

A patent is invalid for anticipation when the same device or method, having all of the elements contained in the claim limitations, is described in a single prior art reference. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 Fed. Cir.

1989); **Perkin-Elmer Corp. v. Computervision Corp.**, 732 F.2d 888, 894, 221 USPQ 669, 673 (Fed. Cir. 1984). An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention. **See In re Spada**, 911 F.2d 705, 708, 15 USPQ 1655, 1657 (Fed. Cir. 1990); **Diversitech Corp. v. Century Steps, Inc.**, 850 F.2d 675, 678, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

The novel aspects of the invention must be disclosed and not left to inference, that is, a patentee may not rely on the inference of a person of ordinary skill in the pertinent art to supply such novel aspects. **See Genentech Inc. v. Novo Nordisk A/S**, 108 F.3d 1361, 1366, 42 USPQ2d 1001, 1005 (Fed. Cir. 1997) (stating that the knowledge of a hypothetical person of ordinary skill in the art cannot be used to supply the patentable aspects of the invention).

"Deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" **In re Zurko**, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Furthermore, "the Board's findings must extend to all material facts and must be documented on the record, lest the 'haze of so-called expertise' acquire insulation from accountability." **In re Lee**, 277 F.3d 1338,

1345, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002). Here, we find the Examiner's arguments to be supported merely by the Examiner's own expertise instead of the evidence of record and the teachings of prior art which are required in order to establish a *prima facie* case of anticipation. Accordingly, we do not sustain the 35 U.S.C. §§ 102 and 103 rejections of any of claims. A discussion of the applied prior art is below

**35 U.S.C. § 102**

**WALKER**

While Walker teaches a combination of a slot machine and a trivia game with the ability to access higher rewards (Walker abstract), we find that Walker does not teach the use of two payoffs as required by the language of all of the independent claims. Walker teaches that the payoff from the game of chance is either raised or reduced based upon a correct or incorrect answer to the trivia question. Therefore, Walker teaches a single payoff. Additionally, we find that the spinning of the reels each iteration of the game of chance would not amount to the occurrence of a bonus condition after the game of chance to initiate the game of skill.

From our review of the teachings of Walker, we find that Figure 10 teaches that the house advantage or the payoff would vary. Therefore, we find that the payoff would be variable for the game of chance and would be different for the combination of the

game of chance with the trivia game. Therefore, there would have been a range of house advantages since it would change for different levels of participation.

We find that the examiner makes one material error with respect to "casino games" that these games of chance all have a consideration of house percentage and that it is "rudimentary to the design of wagering games." (Answer at page 6.) While it is true that house percentage is essential to the financial well being of a casino, we do not find that all machines and games must "necessarily" have a positive house advantage since some machines are used as noise makers and used as attractions rather than as moneymakers. While we can agree that house advantage is a consideration, we cannot agree with the examiner that the house advantage would be within a predetermined range and that range would have set limits based on the correctness of the answers and the wager as recited in independent claim 1. Therefore, we cannot sustain the rejection of independent claims 1, 19, 25 and 42 and their dependent claims based on Walker.

Additionally, we note that the examiner has argued throughout the prosecution that many of the features of the claimed invention are old and well known or known in the art, but we note that one of the requirements to support a rejection under 35 U.S.C. § 102 is that a single prior art reference must teach or disclose the totality of the

claimed invention. Therefore, the mere fact that certain facts were old and well known is not sufficient to support a finding of anticipation unless those additional facts or features MUST NECESSARILY have been present in the applied reference. Additionally, the examiner cites "Smart Casino Gambling," by Olaf Vancura that "almost all games enjoy[s] a positive expectation" to support a finding that the house advantage was known and present. Here, we agree with the quotation that almost all games enjoy a positive house advantage, but not all. Therefore, we find that it need not be inherent, but may or may not be obvious that it is desirable to have a positive house advantage in all casino games. We make no determination thereto.

#### **CLAYPOLE**

While Claypole teaches the use of game of skill, such as a quiz game, (Claypole at pages 3, 4, and 7), Claypole does not specifically address that the outcome of the combination of game of chance and game of skill would have separate payoffs. (Reply brief at pages 14-15.) From our review of the teachings of Claypole, we find no clear discussion that there are two separate payoffs for the two portions of the combined game. The examiner maintains that Claypole teaches the separate payoffs by the discussion of the player using the collect button. (Answer at page 10, Claypole at page 12.) While this shows the ability to collect the winnings from the

game of chance, there is no discussion of how the payoff of the trivia or quiz game would be made and what the wager would be.

From our review of the Claypole reference, we find that Claypole is silent as to the payoffs and the house advantage. We find Claypole to be a general teaching of multiple variations on combined games with little detail thereto. The examiner again maintains that it would be inherent that the house advantage would have been present. The examiner maintains that evidence attached to the answer shows "the tendency and ability of one skilled in the art to consider the house percentage when designing a casino game." (Answer at page 10.) We agree with the examiner in general, but find no teaching within the reference with respect to the house advantage being any more than a singular value. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent within the teachings of Claypole. Accordingly, we cannot sustain the rejection of the independent claims based upon the teachings of Claypole since Claypole does not teach all of the claimed limitations.

#### **KELLER**

Keller teaches the combination of the game of chance tied by the use of a payoff of an non-monetary token which may only be used to obtain access to a physical or mental game of skill. If the player is successful in the game of skill, the individual is



awarded a prize based upon the indicium on their token. Here, we agree with appellant that the Keller game combination is more of a combination for entertainment in areas with limited ability to play games of chance for monetary gain. (Brief at pages 18 and 19.) Appellant argues that there is no bonus condition in the game of chance. (Brief at page 19.) While we agree with appellant concerning the payoff from the game of chance in Keller, we find no limitation on what the payoff of the game of chance must be. Here Keller has two separate and different payoffs and the winning token in the game of chance must be used as a entry into the game of skill. Therefore, Keller teaches the use of two payoffs, but requires that first payoff to be used to enter the game of skill. While it is not the same as in appellant's disclosed method, we agree with the examiner that it is sufficient to meet the limits of the independent claim 1. (Answer at page 10.)

What we do not find is any discussion of house advantage in the teachings of Keller. Again, the examiner maintains that one skilled in the art would have recognized that the casino game of Keller would be profit driven and the house advantage is considered to inherently have a house advantage within a predetermined range. (Answer at page 11.) Again, we agree with appellant that the examiner has gone beyond the express disclosure of Keller and made assumptions which do not have to necessarily occur. Here, the examiner does not identify why the house advantage would have been a range rather than a singular value. Therefore, we cannot agree with

the examiner that the claimed house advantage would have been inherent within the teachings of Keller. Accordingly, we cannot sustain the rejection of independent claims 1 and 42 based upon the teachings of Keller since Keller does not teach all of the claimed limitations.

### **EVANS**

Appellant argues that Evans does not teach the use of two separate payoffs. (Brief at page 21.) We agree with appellant that Evans teaches the use of a game of chance to establish what payoff may be achieved by the subsequent play of a game of skill. Therefore, we agree with appellant's argument at page 21 of the brief that Evans does not provide two separate payoffs. Furthermore, we do not find the occurrence of a bonus condition in the play of the game of chance for the chance to play the game of skill. Here, the examiner seems to maintain that each play of the game of chance would have resulted in a bonus condition. Again, we find this to be an unreasonable interpretation of appellant's claim limitation.

Again, as with the teachings of Walker, Claypole and Keller, we find no teaching or discussion of the use of a house advantage as a range rather than as a singular value. Again, the examiner maintains that casino games are known to have "a house percentage within a 'predetermined range'" (answer at page 11) and that the issue has

been "beat to death throughout the answer." Here again, we cannot agree with the examiner that the house advantage must necessarily be a variable quantity that is within a predetermined range having set limits based on the correctness of the answers and the wager, as recited in the language of independent claims 1 and 42. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent within the teachings of Evans. Accordingly, we cannot sustain the rejection of independent claims 1 and 42 based upon the teachings of Evans since Evans does not teach all of the claimed limitations.

### **35 U.S.C. § 103**

With respect to independent claims 19 and 25, the examiner maintains that the house advantage is "inherent in casino games." (Answer at page 13.) While the examiner has based the rejection under 35 U.S.C. § 103, the examiner continues to maintain that house advantage is inherent. We again maintain that the house advantage is not inherent, but may or may not be deemed to be an obvious design consideration as also advanced by the examiner. (Answer at pages 11-13.) Yet, we do not find any discussion of having the house advantage as a variable quantity within a set range of predetermined values. Therefore, we cannot sustain the rejection of independent claims 19 and 25 since the examiner relies upon the same bases for the rejection as discussed above with respect to the rejections under 35 U.S.C. § 102

which are not resolved or addressed by the examiner's addition of the teachings of Thompson and an attempt to invoke the additional facts which are common knowledge and elements of design in the modification of the base teachings. Accordingly, we do not find that the examiner has established a *prima facie* case of obviousness, and we cannot sustain the rejection of independent claims 19 and 25 and their respective dependent claims 20-24, and 26-30.

With respect to dependent claims 8-11, 14-17, 47, 49, 51-54, 56, and 58, we do not find that the teachings of Thompson remedy the deficiencies in Keller and Evans. Therefore, we will not sustain the rejection of claims 8-11, 14-17, 47, 49, 51-54, 56, and 58.

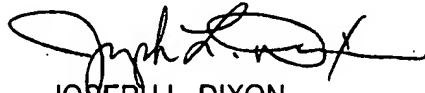
With respect to dependent claims 130-132, we cannot agree with the examiner that the mathematics of each well-known game are considered synergistic and that it would have been obvious to one skilled in the art to design the game to achieve the claimed house percentage since the examiner has not shown why it would have been obvious to one of ordinary skill in the art at the time of the invention to have the house advantage set as a range of values rather than as a singular value. Therefore, we cannot sustain the rejection of dependent claims over Walker, Claypole, Keller and Evans in view of known mathematics and gaming.

### CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2, 4-30, 42-47, 49-55, 57, and 58 under 35 U.S.C. § 102 is reversed, and the decision of the examiner to reject claims 8-11, 14-17, 19-30, 47, 49, 51-54, 56, 58 and 130-132 under 35 U.S.C. § 103 is reversed.

### REVERSED

  
JOSEPH F. RUGGIERO  
Administrative Patent Judge

  
JOSEPH L. DIXON  
Administrative Patent Judge

  
STUART S. LEVY  
Administrative Patent Judge

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JLD/vsh

Appeal No. 2004-0357  
Application No. 09/372,560

ROBERT C. DORR ESQ  
DORR, CARSON, SLOAN & BIRNEY PC  
3010 EAST 6TH STREET  
DENVER, CO 80206



The opinion in support of the decision being entered today was not written for publication  
and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte OLAF VANCURA

Appeal No. 2005-1374  
Application No. 09/875,753

ON BRIEF

MAILED

AUG 17 2005

U.S. PATENT AND TRADEMARK OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Before RUGGIERO, DIXON, and LEVY, **Administrative Patent Judges.**  
DIXON, **Administrative Patent Judge.**

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1, 3, 8-10, 19, 24, 25 and 30, which are all of the claims pending in this application.

We REVERSE and make a NEW GROUNDS OF REJECTION.

## BACKGROUND

Appellant's invention relates to a knowledge-based casino game and method therefor. An understanding of the invention can be derived from a reading of exemplary claims 1, 19 and 25, which appear below.

1. A method for playing a casino game comprising the steps of:

receiving a wager,

playing an underlying game of chance,

playing a knowledge-based bonus game using answers from a player in combination with the underlying game of chance, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.

19. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:

receiving a wager,

playing the underlying casino game of chance, stopping play of the underlying casino game of chance,

playing the knowledge-based bonus game when the underlying casino game of chance is stopped, the steps of playing the knowledge-based game at least having the steps of:

(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query,

(c) paying the player based upon the at least one answer by the player providing a house advantage within a predetermined range for the



combined knowledge-based bonus game and underlying casino game, the predetermined range having a set limit based at least upon all answers to all queries in the knowledge-based game are always correct and the wager.

25. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of: playing the underlying casino game of chance, playing the knowledge-based bonus game in combination with the underlying game, the steps of playing the knowledge-based game at least having the steps of:

(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query, the combined knowledge-based bonus game with the underlying casino game having a house advantage in a range from a first set limit based on all answers to all queries are correct and a second limit based on all answers to all queries are guessed.

The prior art of record relied upon by the examiner in rejecting the appealed claims:

Thompson	5,178,545	Jan. 12, 1993
Keller, Jr.	5,718,429	Feb. 17, 1998
Walker et al. (Walker)	6,193,606	Feb. 27, 2001
		(filed Jun 30, 1997)
Evans	GB 2,197,974	Jun. 2, 1988
Claypole et al. (Claypole)	GB 2,262,642	Jun. 23, 1993

The prior art relied upon by the Board<sup>1</sup> in rejecting claims 1, 3, and 9 below:

Walker et al. (Walker)	6,193,606	Feb. 27, 2001
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<sup>1</sup> We note that no dates are provided by the examiner with the references attached to the Examiner's Answer. The dates presumed are from the internet. The examiner should determine the correct dates and fill out a PTO-892 with correct information.

Appeal No. 2005-1374  
Application No. 09/875,753

Vancura, Smart Casino Gambling: How to Win More and Lose Less, Chapter 2: How Do Casinos Make Money, pp. 23-33, Index Publishing Group, Inc. (1999-presumed.)

Martinez, Managing Casinos: A Guide for Entrepreneurs, Management Personnel and Aspiring Managers, pp. 40-43, Barricade Books. (1995-presumed.)

Kilby et al. (Kilby), Casino Operations Management, John Wiley & Sons, Inc., Chapter 7: Slot Management, pp. 103-127 and Chapter 13: Table Game Hold as a Management Tool, pp. 213-225. (1998-presumed.)

Claims 1, 3, 8-10, 18, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 112, first paragraph as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1, 3, 8, 9, and 18 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, and 18 stand rejected under 35 U.S.C. § 102 as being anticipated by Keller or Evans.

Claims 1, 3, 8-10, 18, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 102 as being anticipated by Walker.

Claims 1, 3, 8-10, 18, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 102 as being anticipated by Claypole.

Claims 8-10, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Keller or Evans in view of Thompson.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 17, mailed May 16, 2003) for the examiner's reasoning in support of the rejections, and to appellant's brief (Paper No. 15, filed Feb. 24, 2002) and reply brief (Paper No. 18, filed Jul 10, 2003) for appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Appellant has elected to group the claims into three separate groupings. Therefore, we will select a single claim from each group as the representative claim. Only those arguments actually made by appellants have been considered in this decision. Arguments that appellant could have made but chose not to make in the brief have not been considered. We deem such arguments to be waived by appellant [see 37 CFR § 41.37(c)(1)(vii) effective September 13, 2004 replacing 37 CFR § 1.192(a)]. We will consider the appealed claims separately only to the extent separate arguments for patentability are presented. Any dependent claim not separately argued will stand or fall with its base claim. **Note In re King**, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); **In re Sernaker**, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

**35 U.S.C. § 112, FIRST PARAGRAPH**

As our reviewing court states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." **Texas Digital Sys., Inc. v. Telegenix, Inc.**, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002) **cert. denied**, 123 S.Ct. 2230 (2003).

Moreover, the intrinsic record also must be examined in every case to determine whether the presumption of ordinary and customary meaning is rebutted. Indeed, the intrinsic record may show that the specification uses the words in a manner clearly inconsistent with the ordinary meaning reflected, for example, in a dictionary definition. In such a case, the inconsistent dictionary definition must be rejected. [Citation omitted.] ("[A] common meaning, such as one expressed in a relevant dictionary, that flies in the face of the patent disclosure is undeserving of fealty."); **Liebscher v. Boothroyd**, 258 F.2d 948, 951, 119 USPQ 133, 135 (CCPA 1958) ("Indiscriminate reliance on definitions found in dictionaries can often produce absurd results."). In short, the presumption in favor of a dictionary definition will be overcome where the patentee, acting as his or her own lexicographer, has clearly set forth an explicit definition of the term different from its ordinary meaning. [Citations omitted.] Further, the presumption also will be rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction,

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representing a clear disavowal of claim scope. See **Teleflex Inc. v. Ficosa North America Corp.**, 299 F.3d 1313, 1324, 63 USPQ2d 1374, 1380. **Texas Digital Sys., Inc v. Telegenix, Inc.**, 308 F.3d 1193, 1204, 64 USPQ2d 1812, 1819.

Our reviewing court has recently clarified the usage of intrinsic and extrinsic evidence for claim interpretation in **Phillips v. AWH Corporation**, Fed. Cir. Appeals 03-1269, -1286, Slip Opinion at pages 30-31. (July 12, 2005). The Court stated that

In Vitronics, [**Vitronics Corp. v. Conceptronic, Inc.**, 90 F.3d 1576, 39 USPQ2d 1573 (Fed. Cir. 1996)] this court grappled with the same problem and set forth guidelines for reaching the correct claim construction and not imposing improper limitations on claims. 90 F.3d at 1582. The underlying goal of our decision in Vitronics was to increase the likelihood that a court will comprehend how a person of ordinary skill in the art would understand the claim terms. See id. at 1584. In that process, we recognized that there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence. See id. at 1583-84; Intel Corp. v. VIA Techs., Inc., 319 F.3d 1357, 1367 (Fed. Cir. 2003).

Appellant has clearly identified and specifically defined certain terms in the specification and we are obligated to interpret these terms as specifically defined and give those other limitations their ordinary meaning.

The Examiner appears to be requiring that Appellants set forth some special indication that they are acting as their own lexicographer or providing a special definition for the phrase "in combination with." We find there is no such requirement in the statutes, rules, or case law. Rather, it is only required that any special meaning

assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." **Multiform Desiccants Inc. v. Medzam Ltd.**, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also **Process Control Corp. v. HydReclaim Corp.**, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). We find no special definition or need therefor in the present disclosure and claims.

The examiner maintains that the claim language "in combination with" implies that the game of chance and the trivia game are played simultaneously rather than sequentially as disclosed in the specification. (Answer at pages 2-4.) Appellant argues that the examiner has not presented a *prima facie* case of a lack of enablement.<sup>2</sup> (Brief at pages 6-15.) Giving the phrase its ordinary meaning, we find that "combination" means the action of combining two or more different things in some manner. The examiner maintains that "[t]his is a scope of claim problem." (Answer at page 3.) While we agree with the examiner that there is a scope of claim problem with appellant's claim language, we find that the claim language is quite broad, and we shall address that issue with respect to 35 U.S.C. § 103 in our new grounds of rejection.

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<sup>2</sup> Additionally, appellant argues that the examiner has not clearly set forth whether the grounds of rejection is based upon the written description requirement or the enablement requirement. (Brief at pages 6-15.) We find that the examiner had used varied terminology that may have caused confusion, but since the examiner had incorporated the prior rejection based upon enablement, we find it clear that the rejection has remained a rejection based upon enablement and that any time appellant may have clarified the basis of the rejection with a telephone call to the examiner. We find no lack of due process on the record.

From our review of appellant's specification, we find the specification to have adequate disclosure to enable one skilled in the art to make and/or use the claimed invention. While the examiner has identified a perceived problem with whether the two games are played simultaneously or sequentially, we find that either way, it is the computation and setting of the house advantage so as to be within a preset range for the two outcomes/results of the two individual games. The two outcomes produce a desirable advantage for the house. We find that the language of independent claim 1 while broad, has been adequately described to enable one skilled in the art to make and/or use the claimed invention. Therefore, we cannot sustain the rejection of independent claim 1 and its dependent claims. Similarly, we find adequate disclosure for further limited independent claims 19 and 25, and we will not sustain the rejection of independent claims 19 and 25 and their dependent claims.

**35 U.S.C. § 112, SECOND PARAGRAPH**

After reviewing Appellant's disclosure, it is apparent to us that the claim language refers to any combination of a game of chance and a knowledge-based trivia game as these two terms have been clearly defined in appellant's specification at page 6. While the claims are perhaps broader by referring to the two games "in combination with" each other rather than sequentially or simultaneously, we find no uncertainty or lack of specificity exists as asserted by the Examiner. Similarly, while the use of the terminology "in combination with" or "combined" are broad recitations, we find no

ambiguity in the use of such language. The breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 692, 169 USPQ 597, 600 (CCPA 1971).

It is our view that the skilled artisan, having considered the specification in its entirety, would have no difficulty ascertaining the scope of the invention recited in independent claim 1 and its associated dependent claims. Therefore, the rejection of claims 1, 3, 8, 9, and 18 under the second paragraph of 35 U.S.C. § 112 is not sustained.<sup>3</sup>

### **35 U.S.C. § 102**

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

**Verdegaal Bros. Inc. v. Union Oil Co.**, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), **cert. denied**, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in **Kalman v. Kimberly-Clark Corp.**, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), **cert. denied**, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it." While all elements of the claimed invention must appear in a single reference, additional references may be used to interpret the anticipating

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<sup>3</sup> While the examiner has not included dependent claim 10 which includes the same limitations as independent claim 1, we would similarly reverse a rejection of this claim on the same basis.



reference and to shed light on its meaning, particularly to those skilled in the art at the relevant time. **See Studiengesellschaft Kohle v. Dart Indus., Inc.**, 726 F.2d 724, 726-727, 220 USPQ 841, 842-843 (Fed. Cir. 1984).

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. **RCA Corp. v. Applied Digital Data Systems, Inc.**, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); **cert. dismissed**, 468 U.S. 1228 (1984); **W.L. Gore and Associates, Inc. v. Garlock, Inc.**, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), **cert. denied**, 469 U.S. 851 (1984).

We consider first the examiner's 35 U.S.C. § 102 rejection of claim 1 based upon Keller, Evans, Walker, and Claypole. With respect to independent claim 1, the representative claim for Appellant's first suggested grouping of claims subject to this rejection, the examiner indicates how the various limitations read on the recited limitations and relies upon inherency with respect to the lack of any disclosure of a house advantage or a house advantage "within a predetermined range." (Answer at pages 5-8.)

After reviewing the four references in light of the arguments of record, we are in agreement with the Examiner that Appellant's arguments are not commensurate with the scope of representative claim 1 and merely reiterate the language of the claims

repeatedly. In our view, Appellant's arguments improperly attempt to narrow the scope of the claim by implicitly adding disclosed limitations which have no basis in independent claim 1. See *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

"Deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" *In re Zurko*, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Furthermore, "the Board's findings must extend to all material facts and must be documented on the record, lest the 'haze of so-called expertise' acquire insulation from accountability." *In re Lee*, 277 F.3d 1338, 1345, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002). Here, we find the Examiner's arguments to be supported merely by the Examiner's own expertise instead of the evidence of record and the teachings of prior art which are required in order to establish a **prima facie** case of anticipation or obviousness.

On page 5 of the answer, the examiner refers the house advantage as a fundamental truth along with its variables. We disagree with the examiner's conclusion and find that while well known, the designer need not always design or program the casino game to have an advantage to the house whereas a game or machine may be used as a noise maker or machine to entice players into the casino thereby having a house disadvantage, but paying dividends to the house by advertising or enticing others to start to play. On page 16, of the answer, the examiner refers to references that have not been applied in the rejection under appeal. These references have been given no

consideration since they were not included in the statement of the rejection or eligible in a combination under 35 U.S.C. § 102. See *Ex parte Raske*, 28 USPQ2d 1304, 1305 (Bd. Pat. App. & Int. 1993).

Here, we find the Examiner's arguments to be supported merely by the Examiner's own expertise instead of the evidence of record and the teachings of prior art which are required in order to establish a *prima facie* case of anticipation. Accordingly, we do not sustain the 35 U.S.C. §§ 102 and 103 rejections of any of claims. A discussion of the applied prior art is below.

#### **WALKER**

While Walker teaches a combination of a slot machine and a trivia game with the ability to access higher rewards (Walker abstract), we find that Walker does not teach the use of a house advantage within a predetermined range as required by the language of all of the independent claims. Walker teaches that the payoff from the game of chance is either raised or reduced based upon a correct or incorrect answer to the trivia question. From our review of the teachings of Walker, we find that Figure 10 teaches that the house advantage or the payoff would vary. Therefore, we find that the payoff would be variable for the game of chance and would be different for the combination of the game of chance with the trivia game. Therefore, there would have been a range of payouts since it would change for different levels of participation.

We find that the examiner makes one material error with respect to "casino games" that these games of chance ALL have a consideration of house

percentage/advantage and that it is "inherent" and a "fundamental truth." (Answer at page 5.) While it is true that house percentage/advantage is essential to the financial well being of a casino, we do not find that ALL machines and games must "necessarily" have a positive house advantage since some machines are used as noise makers and used as attractions rather than as moneymakers. While we can agree that house advantage is a consideration, we cannot agree with the examiner that the house advantage would be within a predetermined range and that range would have set limits based on the correctness of the answers to the trivia questions as recited in independent claim 1. Therefore, we cannot sustain the rejection of independent claims 1, 19, and 25 and their dependent claims based on Walker.

Additionally, we note that the examiner has argued throughout the prosecution that many of the features of the claimed invention are old and well known or known in the art, but we note that one of the requirements to support a rejection under 35 U.S.C. § 102 is that a single prior art reference must teach or disclose the totality of the claimed invention. Therefore, the mere fact that certain facts were old and well known in the (pertinent) art is not sufficient to support a finding of anticipation unless those additional facts or features **MUST NECESSARILY** have been present in the applied reference or teaching. Additionally, the examiner cites "Smart Casino Gambling," by Olaf Vancura that "almost all games enjoy[s] a positive expectation" to support a finding that the house advantage was known and present. (Answer at page 16.) Here, we agree with the quotation that almost all games enjoy a positive house advantage, but

not necessarily all games. Therefore, we find that it need not be inherent, but may or may not have been obvious that it is desirable to have a positive house advantage in all or most of the casino games. Accordingly, we cannot sustain the rejection of the independent claims based upon the teachings of Walker since Walker does not teach all of the claimed limitations.

### **CLAYPOLE**

While Claypole teaches the use of game of skill, such as a quiz game, (Claypole at pages 3, 4, and 7), Claypole does not specifically address that the outcome of the combination of game of chance and game of skill would have a house advantage within a predetermined range. From our review of the teachings of Claypole, we find no clear discussion that there is a house advantage within a predetermined range. From our review of the Claypole reference, we find that Claypole is silent as to the payoffs and the house advantage. We find Claypole to be a general teaching of multiple variations on combined games with little detail thereto. The examiner again maintains that it would be inherent that the house advantage would have been present. The examiner maintains that "[e]ach of the applied references inherently have a predetermined range and the range that is deemed acceptable to commercial viability is subjective." (Answer at page 8.) We agree with the examiner in general, but find within the reference neither a teaching of a house advantage within a predetermined range with nor a teaching of the house advantage being any more than a singular value. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent

within the teachings of Claypole. Accordingly, we cannot sustain the rejection of the independent claims based upon the teachings of Claypole since Claypole does not teach all of the claimed limitations.

#### **KELLER**

Keller teaches the combination of the game of chance tied by the use of a payoff of a non-monetary token which may only be used to obtain access to a physical or mental game of skill. If the player is successful in the game of skill, the individual is awarded a prize based upon the indicium on their token. Here, we agree with appellant that the Keller game combination is more of a combination for entertainment in areas with limited ability to play games of chance for monetary gain. (Brief at pages 21 and 22.) Appellant argues that Keller does not teach a "casino game," but rather is a bifurcated arcade game (Brief at page 23.) While we agree with appellant concerning the payoff from the game of chance in tokens in Keller, we find no limitation on what the payoff of the game of chance must be in the instant claims. Here, Keller has two separate and different payoffs and the winning token in the game of chance must be used as an entry into the game of skill. Therefore, Keller teaches the use of two payoffs, but requires that first payoff to be used to enter the game of skill. While it is not the same as in appellant's disclosed method, we agree with the examiner that it is sufficient to meet the limitations of the independent claim 1 with respect to the steps of playing a game.

What we do not find is any discussion of house advantage in the teachings of Keller. Again, the examiner maintains that one skilled in the art would have recognized that the casino game of Keller would be profit driven and the game is considered to inherently have a house advantage within a predetermined range. (Answer at page 11.) Again, we agree with appellant that the examiner has gone beyond the express disclosure of Keller and made assumptions which do not have to necessarily occur. Here, the examiner does not identify why the house advantage would have necessarily been within a range or rather a singular value. Therefore, we cannot agree with the examiner that the claimed house advantage within a predetermined range would have been inherent within the teachings of Keller. Accordingly, we cannot sustain the rejection of independent claim 1 and dependent claims 3 and 18 based upon the teachings of Keller since Keller does not teach all of the claimed limitations.

#### **EVANS**

Again, as with the teachings of Walker, Claypole and Keller, we find no teaching or discussion of the use of a house advantage within a predetermined range or as a range rather than as a singular value. Again, the examiner maintains that casino games are known to have a house percentage within a predetermined range and that the total prizes awarded would not be greater than the total amount of monies received at the play of the game. (Answer at page 17.) Here again, we cannot agree with the examiner that the house advantage must necessarily have been a variable quantity that is within a predetermined range having set limits based on the correctness of the

answers and the wager, as recited in the language of independent claim 1. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent within the teachings of Evans. Accordingly, we cannot sustain the rejection of independent claim 1 and dependent claims 3 and 18 based upon the teachings of Evans since Evans does not teach all of the claimed limitations.

**35 U.S.C. § 103**

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. *See In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. *See In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. *See In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of



doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. **See In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert. denied**, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 999-1000, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the limitations in dependent claims 8, 9 and 10 and independent claims 19 and 25. The examiner continues to maintain that the house advantage is "inherent" in casino games and that the setting of the house advantage as in the dependent claims is an obvious matter of design choice. (Answer at pages 5 and 6 with respect to the anticipation and page 8.) While the examiner has based the rejection under 35 U.S.C. § 103, the examiner continues to maintain that house advantage is inherent and the specific setting of the house advantage is an obvious matter of design choice. We again maintain that the house advantage is not inherent, but may or may not be deemed to be an obvious design consideration as also advanced by the examiner. Yet, we do not find any discussion of having the house advantage as a variable quantity within a set range of predetermined values. Therefore, we cannot sustain the rejection of independent claims 19 and 25 since the examiner relies upon the same bases for the rejection as discussed above with respect to the rejections under 35 U.S.C. § 102 which are not resolved or addressed by the examiner's addition of the teachings of Thompson and an attempt to invoke the additional facts which are common knowledge and elements of design in the modification of the base teachings. Accordingly, we do not find that the examiner has established a *prima facie* case of obviousness, and we cannot sustain

the rejection of independent claims 19 and 25 and their respective dependent claims 24, and 30 along with dependent claims 8-10 which depend from independent claim 1.

### **NEW GROUNDS OF REJECTION**

Claims 1, 3, and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over Walker in view of the teachings of Vancura, Martinez, or Kilby.

In determining novelty, the first inquiry must be into exactly what the claims define. *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Similarly, a section 103 analysis begins with a key legal question – what is the invention claimed? *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987).

Here, the name of the game is the claim. We look to the language of independent claim 1 and find that the relevant limitation is “playing a knowledge-based bonus game using answers from a player in combination with the underlying game of chance, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.” Here, we find that the limitation as to the game being played and the house advantage therein is akin to an intended field of use preamble which is not realized by the remainder of the claim. In independent claim 1 there is no limitation as to what the range is or that the house advantage is variable and maintained within the range as disclosed in the specification at page 4, lines 18-22. There it states that the:

knowledge-based bonus games . . . are designed to maintain the house advantage in a range from when all answers to all queries in the knowledge-based bonus game are always correct from the player to the other extreme when all answers to all queries in the knowledge-based bonus game are always being guessed at by the player.

In the instant claim language, we find that the claim may reasonably be interpreted to have a house advantage that is always the same and that the value would necessarily be within the range of 0.00000001 to 100 since every set value is within a set range of possible values. Here, we find that independent claim 1 is very broad.

While we agreed with appellant that the teachings of Keller and Evans do not necessarily and inherently teach a casino game with a house advantage within a predetermined range, we do agree with the examiner's conclusions therewith that it would have been obvious to one of ordinary skill in the art at the time of the invention that skilled artisans would have made it one of the major design criteria to assure that there is worst case house advantage that is profitable. And that this value would necessarily be within a predetermined range or a set value.

While not what appellant may have intended the claim interpretation to be, we do not find the above interpretation to be an unreasonable interpretation in light of appellant's broad claim language. Moreover, the instant independent claim does not require that there be any payout, or how the two games are combined, or how the answers from the knowledge-based bonus game are used with the underlying game of chance. We find that independent claim 1 is very broad.

With this said, we find that Walker teaches the use of a trivia game (knowledge-based bonus game) in combination with a slot machine for use in a casino. (Walker at col. 1 and abstract.) Walker discloses that the questions for the trivia game are obtained from a remote location, we find no requirement in the language of independent claim 1 which would preclude this remote access. Walker discloses in Fig. 9 a table/payout database 900 having the schedule for payout for the combined game of chance and the knowledge-based bonus game. (Walker at col. 6.) Walker also discloses an enhanced payout database 1000. Walker discloses the corresponding method for playing the combined game at columns 6-7 and states that “[b]ased on the identified slot outcome, as well as the player's answer to the trivia question, the CPU 310 locates the appropriate payout in one or more stored payout tables 900, 1000, based on the current reward level.” Therefore, we find that Walker teaches the claimed invention, but for “the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.” Clearly, we find that it would have been obvious to one of ordinary skill in the art at the time of the invention for the casino to attempt to make a profit or at least make sufficient revenue for the gambling machines and games so as to pay its overhead costs. Therefore, we find that it would have been one of the paramount design considerations in formulating the payout tables of Walker to have allotted the payouts in the table so as to give the house an advantage of at least a predetermined amount or set value taking into consideration the worst case scenario if nothing else.

As evidence of the above concept of house advantage, we rely upon the individual teaching of Vancura, Martinez, or Kilby which the examiner has appended to the answer. Each of these references teaches the basic operational concepts of the casino and casino games and the need for the generation of an advantage to the house so as to generate operational income and a profit.

With respect to dependent claim 3, Walker teaches various alternative embodiments of the combined casino game where the two games are interleaved and where the two games are played sequentially. (See Walker at col. 11, line 15.) Therefore, we find that the combined teachings would have fairly suggested the invention as recited in dependent claim 3.

With respect to dependent claim 9, as discussed above, we find that the skilled artisan would have at least taken into consideration all trivia questions being answered correctly so as to give the house an advantage of at least a predetermined amount or set value taking into consideration the worst case scenario if nothing else. Therefore, we find that the combined teachings would have fairly suggested the invention as recited in dependent claim 9.

We have rejected independent claim 1 and dependent claims 3 and 9 as examples of the breadth of appellant's claims and the appropriateness of a rejection based upon obviousness rather than anticipation as made by the examiner. We leave it to the examiner to further evaluate the remainder of the claims and extend the rejection as is deemed appropriate.

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This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a) (1) (iv).

### CONCLUSION

To summarize, the decision of the examiner to reject claims under 35 U.S.C. § 112, FIRST PARAGRAPH is reversed, the decision of the examiner to reject claims under 35 U.S.C. § 112, SECOND PARAGRAPH is reversed, the decision of the examiner to reject claims under 35 U.S.C. § 102 is reversed, and the decision of the

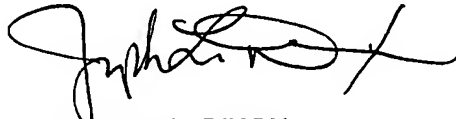
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examiner to reject claims under 35 U.S.C. § 103 is reversed. We have rejected claims  
1, 3 and 9 under 35 U.S.C. § 103 under the authority under 37 CFR 41.50(b).

**REVERSED**



JOSEPH F. RUGGIERO  
Administrative Patent Judge



JOSEPH L. DIXON  
Administrative Patent Judge



STUART S. LEVY  
Administrative Patent Judge

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Application No. 09/875,753

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Docket No.: 048347-0017

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

VANCURA, OLAF

Application No.: 10/189,721

Filed: July 03, 2002

For: KNOWLEDGE-BASED CASINO GAME AND METHOD THEREOF

: Customer Number: 20277

: Confirmation Number: 2116

: Tech Center Art Unit: 3711

: Examiner: Pierce, William M

**APPEAL BRIEF**

Mail Stop Appeal Brief  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed May 10, 2005,  
wherein Appellant appeals from the Primary Examiner's rejection of claims 1-24, 27-36, 39, 40  
and 43.

**I. Real Party In Interest**

This application is assigned to Mikohn Gaming Corporation by assignment recorded on  
August 11, 1999, at Reel 010169, Frame 0657.

**II. Related Appeals and Interferences**

The subject matter involved in this Appeal relates to the subject matter involved in U.S.  
Patent Application Serial No. 09/372,560 (the '560 application) and U.S. Patent Application  
Serial No. 09/875,753 (the '753 application). The present application, as well as the '753

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application, are both continuation applications of the '560 application. Prior decisions by the Board of Patent Appeals and Interferences for both the '560 and '753 applications accompany this Appeal Brief and are included in the Related Proceedings Appendix.

### **III. Status of Claims**

Claims 1-24, 27-36, 39, 40 and 43, all pending claims, have been finally rejected. It is from the final rejection of claims 1-24, 27-36, 39, 40 and 43 that this Appeal is taken.

### **IV. Status of Amendments**

No Amendment has been filed subsequent to the issuance of the Final Office Action dated February 10, 2005.

### **V. Summary of Claimed Subject Matter**

The present invention is directed to a novel casino game and methods for playing a novel casino game which involves a knowledge-based bonus game (using actual answers from a player) combined with an underlying game of chance (embodiments are provided throughout the written description of the specification, as at page 10, line 14 through page 12, line 28). The player's response is used to precisely control the house advantage within a predetermined range (page 14, lines 5-20 of the written description) for the casino game even against a hypothetical player with perfect knowledge. The predetermined range varies between a maximum house advantage and a minimum house advantage, and can be calculated to accommodate many different casino game designs, such as those appearing in Table I on page 15 of the written description and illustrated throughout the specification.

The designing of a successful knowledge-based bonus game in combination with an underlying game of chance required negotiating and solving two formidable problems:

(1) the game must award a player who correctly answers yet ensure the house commercial viability by preventing a perfect knowledge player or a team of players working together from cleaning out or bankrupting the house (page 18 of the written description, lines 5 through 8); and

(2) the game must be fair to a player with no knowledge (such as a player guessing at answers), i.e., the game must not present a prohibitively high house advantage, because players must be encouraged to continue to play even if they are not always correct in their responses (page 17 of the written description, lines 1 through 4).

The present invention addresses and solves the first problem by providing a game which need not be monitored and need not monitor itself, because a set house advantage is established for the perfect player for playing the game (page 11 of the written description, lines 7 through 11, page 17, lines 20 through 24). The second problem is addressed and solved by providing a set house advantage for the player who always guesses at the answer, as provided by random number generator 50 in Fig. 1 and illustrated by the formulas and examples throughout the specification.

The claimed subject matter provides an instantaneous house advantage in a predetermined range between the set limits of the perfect player and the player who always guesses, thereby preventing a perfect player from breaking the house because the house has a statistical house advantage that is preserved over time (page 17 of the written description, lines 20 through 24). However, the player who always guesses is assured a fair return under a second statistical house advantage that is preserved over time.

The concept of a casino game having a knowledge-based bonus game combined with an underlying game of chance with a house advantage, as in the claimed invention, is alien to the applied prior art. Each of independent claims 1, 16, 24, 27, 33 and 43 is directed to a method for playing a casino game comprising playing an underlying game of chance together with playing a knowledge-based bonus game. Independent claim 36 is directed to a casino game comprising an underlying game of chance together with a knowledge-based bonus game.

Independent claim 1 is directed to a method for playing a casino game. The method comprises, in pertinent part, a casino game having a house advantage within a predetermined range. See specification at page 14, lines 5-20. The house advantage for the casino game is a function of (a) the player's expected rate of return in units in the underlying game of chance, (b) the player's expected rate of return in units for the knowledge-based bonus game, (c) the known statistical frequency rate for stopping the underlying game of chance, and (d) the units of the wager. The predetermined range has set limits for all play of the casino game. See specification at page 8, lines 17 through page 9, line 9.

Independent claim 16 is directed to a method for a player playing a casino game. The method comprises, inter alia, the step of playing the knowledge-based game comprises the steps of: providing at least one query to the player in the knowledge-based bonus game; receiving at least one answer from the player in response to the provided query; paying the player a higher positive bonus amount in units when the at least one answer is correct. The player is paid a lower positive bonus amount in units when the at least one answer is incorrect, the higher and lower positive amounts awarded independently so as not to affect any underlying game of chance award. See specification at Examples 1-2.

Independent claim 24 is directed to a method for a player playing a casino game. The method comprises includes a casino game having a house advantage in a predetermined range with two set limits based on the following: (a) the player's expected rate of return for the underlying game of chance, (b) the player's expected rate of return for the knowledge-based bonus game, (c) the known statistical frequency rate for stopping the underlying game of chance, and (d) the wager. The house advantage has at least one of the two set limits based on all at least one answers for play in the knowledge-based game being always correct and the set limit is the same for all play of the casino game. See specification at page 8, lines 17 through page 9, line 9.

Independent claim 27 describes a method for a player playing a casino game. The method comprises, in part, a casino game having a house advantage that is set over all play of the casino game as a function of the correctness of the at least one answer, with the house advantage being equal to or greater than zero. See specification at page 8, lines 17 through page 9, line 9.

Independent claim 33 is directed to a method for a player playing a casino game. The method includes the steps of varying the knowledge-based game expected rate of return. The varying of the knowledge-based game expected rate of return includes obtaining first and second limits over all play of the casino game. The first limit is based upon all answers from the player in the knowledge-based game being correct and the second limit is based upon all answers from the player in the knowledge-based game always being guessed at. See specification at page 16, lines 6-13.

Independent claim 36 is directed to a casino game. The casino game comprises, *inter alia*, a house advantage for the casino game, in units, varies in a range for all play of the casino game. The house advantage is based on the wager, the negative player expected return, the known statistical frequency, and the positive player expected return, with the house advantage

being equal to or greater than zero. The range is determined by the first and second set limits. See specification at Figure 1.

Independent claim 43 is directed to a method for playing a casino game. The method includes an underlying game of chance and a knowledge-based game. The method includes providing a house advantage for the casino game which is a function at least of the first house advantage and the variable second house advantage. The casino game house advantage falls within a range between a minimum set value and a maximum set value over all play of the knowledge-based game. The maximum casino game house advantage occurs when random guessing occurs by the player over all play of in the knowledge-based game. The minimum casino game house advantage occurs when perfect-knowledge play occurs by the player over all play of the knowledge-based game. See specification at Example 3 and Table 1. The method comprises the step of ensuring that the incurred minimum casino game house advantage is positive, thereby maintaining profitability for an owner of the casino game throughout the casino game house advantage range.

## **VI. Ground of Rejection To Be Reviewed By Appeal**

Claims 1-24, 27-36, 39, 40 and 43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Vancura (U.S. Pat. No. 6,398,218, hereinafter "Vancura") in view of Adams (U.S. Pat. No. 6,709,332, hereinafter "Adams I") and further in view of Claypole (G.B. Pat. App. No. 2,262,642, hereinafter "Claypole") and Demar (U.S. Pat. No. 6,203,429, hereinafter "Demar") and further in view of Martinez ("Martinez"), Managing Casinos: A Guide for Entrepreneurs, Management Personnel and Aspiring Managers, pp 40-43, Barricade Books (1995 – presumed) and Kilby et al. ("Kilby"), Casino Operations Management, John Wiley &



Sons, Inc., pp 197-229 and 321-333 (1998 - presumed) and in further view of Adams (U.S. Pat. No. 6,663,488, hereinafter "Adams II") further in view of Freda (U.S. Pat. No. 5,660,389, hereinafter "Freda") further in view of Forrest et al. (U.S. Pat. No. 6,267,379, hereinafter "Forrest").

## **VII. Argument**

The Examiner, at page 2 of the non-final Office action dated May 5, 2004 ("non-final Office action"), asserted that Vancura teaches that it is well known in the gaming art to combine a first primary game of chance with a secondary or bonus game. This position was maintained by the Examiner in the final Office action dated February 10, 2005 ("final Office action"). The Examiner admitted that Vancura fails to identify the secondary game as a knowledge-based bonus game as presently recited in each of the independent claims, but nevertheless, relied on Claypole as teaching a primary game combined with a secondary quiz/skill game. The Examiner merely concluded that it would have been obvious to provide a secondary quiz/skill game as the secondary game in Vancura.

Each of independent claims 1, 16, 24, 27, 33, and 43 requires, in pertinent part, a method for playing a casino games comprising the step of playing an underlying game of chance interconnected with a knowledge-based bonus game. Independent claims 36 recites a casino game comprising a game of chance interconnected with a knowledge-based bonus game.

The primary reference to Vancura relates to gaming machines and, in particular gaming machines such as slot machines incorporating a bonusing game. See Vancura at col. 1, lines 17-20. As discussed at col. 3, lines 6-15, Vancura provides adjacent gaming machines where the first gaming machine plays a conventional slot gaming machine and the second gaming machine

provides the bonusing feature. In a preferred embodiment, Vancura discloses that the gaming machines are slot machines and each slot machine employs physical reels with stops that are equally likely to happen and wherein each reel has a predetermined number of stops. See Vancura at col. 3, lines 19-22. In the primary slot machine, a bonusing qualifying event is used to enable a player to play the secondary slot machine containing the bonus game. See Vancura at col. 3, lines 23-25. The bonusing game on the secondary machine proceeds in a cumulative fashion with the player stopping when special "lose" or "stop" play symbols appear on the payline, when the player issues a stop signal, when a predetermined amount of winnings occurs, when a predetermined number of spins occurs, or any combination thereof. See Vancura at col. 3, lines 25-31. Vancura further discloses, at col. 5, lines 20-25, that the primary gaming machine 10 can be any suitable gaming machine such as slot, poker, keno, etc. and the secondary gaming machine 20 can be the same or different than the primary gaming machine or can be any other suitable gaming machine. The Examiner apparently relies on this last segment in an attempt to justify an "obvious to try" standard.

Appellant submits that Vancura fails to disclose or fairly suggest a knowledge-based casino bonus game. Vancura does not disclose or fairly suggest a knowledge-based casino bonus game, much less a knowledge-based casino bonus using answers from the player. Moreover, while Claypole teaches the use of a secondary game of skill, such as a quiz games, Claypole generally teaches multiple variations on combined games with minimal detail about the secondary game. See Honorable Board decision in the copending '753 application at page 15. The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention under any statutory provision always rests upon the Examiner. *In re Mayne*, 41 USPQ2d 1451 (Fed. Cir. 1997); *In re Duel*, 34 USPQ2d 1210 (Fed. Cir. 1995); *In re Bell*, 26 USPQ2d 1529

(Fed. Cir. 1993). Appellant submits that this burden has not been established. Indeed, the Examiner's proposed modification of Vancura with Claypole amounts to nothing more than a judicially condemned "obvious to try" standard. *In re O'Farrell*, 853 F.2d 894, 7 USPQ2d 1673 (Fed. Cir. 1988); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988). The Examiner has not made the requisite "clear and particular" factual findings as to any specific understanding or specific technological principle which would have realistically impelled one having ordinary skill in the art to modify the gaming machine (with bonusing) disclosed by Vancura to arrive at the claimed invention. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000); *Ecolchem Inc. v. Southern California Edison, Co.*, 222 F.2d 973, 56 USPQ2d 1065 (Fed. Cir. 2000); *In re Kotzaab*, 217 F.3d 1365, 55 USPQ 1313 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.2d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The Examiner provides no factual basis to explain how the proposed modification would be implemented, but rather, only forces the two references together. The only apparent motivation is found in Appellant's disclosure, which, of course, can not be properly relied upon by the Examiner to support the ultimate legal conclusion of obviousness under 35 U.S.C. § 103. *Panduit Corp. v. Dennison Mfg. Co.*, 774 F.2d 1082, 227 USPQ 337 (Fed. Cir. 1985).

Moreover, none of the remaining 7 references relied on by the Examiner remedy the above argued deficiencies of Vancura and Claypole. Ergo, even if the applied references are combined as suggested by the Examiner, and Appellant does not agree that a requisite fact-based motivation has been established, the claimed inventions would not result. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988). In view of the foregoing, the rejection of claims 1-24, 27-36, 39, 40 and 43 is not legally viable. Appellant, therefore,

solicits the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103 for at least these reasons.

The separate patentability of the several independent claims is advocated below.

#### **Independent claims 1 and 24**

Independent claim 1, dependent claims 2-15 and 39, and independent claim 24 stand or fall together as a group. Independent claim 1 and 24 each describes, *inter alia*, a method for playing a casino game having a house advantage within a predetermined range, with the house advantage being a function of: (a) the player's expected rate of return for the underlying game of chance; (b) the player's expected rate of return for the knowledge-based bonus game; (c) the known statistical frequency rate for stopping the underlying game of chance; and (d) the wager. Appellant submits that none of the applied references teaches a house advantage within a predetermined range, as required by each of independent claims 1 and 24.

The Examiner asserted, at page 3 of the non-final Office action, that Vancura discusses a "house advantage", at cols. 9 and 10, and further argued that a house advantage is "old and well known" in the design of a machine. The Examiner, at pages 3-4 of the non-final Office action noted that Demar discloses that the calculation of the machine requires the inclusion of a bonus game. It was argued that one of ordinary skill would know the mathematics and variables involved in figuring out a favorable house advantage for a combination of primary and secondary games as taught by the prior art, and that Demar teaches the same by stating that the pay tables for the basic and bonus games must be mathematically combined such that there is a positive hold percentage, which represents the casino's profit. The Examiner further attempted to buttress the argument with reference to the game of black jack and Martinez's discussion of the

house advantage for the game of black jack. With respect to Kilby, the Examiner maintained that Kilby “goes deeper into the consideration of the house advantage in casino games.”

In the final Office action, the Examiner, at page 2, asserted the concept of a house advantage is one of a “range” of profits that a casino can expect to enjoy upon the implementation of a game. The Examiner stated that in a slot machine game the range is fixed by probability and mathematics and when the games allows more player choice and skill, such as black jack and games with wagering options, the house advantage falls within a range determined by a player’s decisions as a result of their gaming skills. The Examiner argued that designing a range so that the house does not lose money and so that a skillful player can “beat the house” is not new. The Examiner concluded that a house percentage is known in the art and a range inherently having “set limits” between a “smallest and a largest” are fairly taught by the applied references.

Appellant submits that the Examiner’s arguments in the non-final and final Office actions are based solely on the Examiner’s opinion instead of the evidence of record and the teachings of the prior art which are required in order to establish a *prima facie* case of obviousness. The Examiner has substituted facts with opinion-laden arguments and that the limitations recited in independent claims 1 and 24 are conspicuously absent from the applied references. See Honorable Board decision in the copending ‘753 application at page 12. Appellant submits that none of the applied references disclose or remotely suggests a house advantage as a variable quantity within a set range of predetermined values. Moreover, the Examiner has misconstrued the meaning of the present claimed “house advantage within a predetermined range”. Indeed, the Examiner, at page 3 of the final Office action, refers to a house percentage being in the range of

profits the house expects to enjoy from the operation of a game. This misconception of the claim term is present throughout the rejection.

The Examiner argues that the concept of house advantage is "old and well known" in the art and that casino games always have a house advantage otherwise they could not operate. Appellant does not deny that profitable casino gambling games have a house advantage. But this has nothing to do with the claimed invention involving a house advantage within predetermined limits for a combined knowledge-based game and an underlying game of chance. The Examiner ignores the following facts: (1) the claimed invention provides a house advantage within a predetermined range for a combined knowledge-based game and game of chance; (2) the applied references are conspicuously silent as to any house advantage, certainly not within a predetermined range, much less associated with a knowledge-based game let alone one combined with a game of chance; and (3) the Examiner's conventional house advantage enjoyed by casinos has not been shown to involve a predetermined range or relate to a knowledge-based game, let alone combined with a game of chance.

The Examiner improperly attempts to extrapolate the known house advantage enjoyed by casinos to the particular games in the applied references. But there is no factual basis to support such extrapolation to a combined game of chance and knowledge-based game and ignore the claim requirement for a predetermined range. Further, any such extrapolation is based upon the legally impermissible assumption that the particular games disclosed in the applied references are, in fact, profitable casino games.

The Examiner proffers no factual evidence to show that the problem of a perfect knowledge player who can bankrupt the house has ever been addressed by a house advantage, let alone within a predetermined range which also accommodates the guessing player, as in the

present invention. The Examiner has generalized too much while paying little attention to the actual applied references. The present invention provides an elegantly clean solution to the problem of the knowledgeable player. The claimed invention encourages players with limited knowledge while protecting the house against the perfect knowledge player.

Appellant does not deny that profitable casino gambling games have a house advantage. Of course there are house odds in profitable gambling games. Otherwise, there would be no casinos. There would be no profitable slot machines anywhere in the world. However, the Examiner's attempt to extrapolate the known house percentage associated with a profitable casino game of chance to the particular games disclosed in the actually applied references is devoid of facts and relies upon assumptions. None of the applied references discloses a method of playing a casino game as claimed wherein an underlying game of chance is initially played followed by a knowledge-based bonus game, wherein the integrated knowledge-based bonus game with the underlying game of chance has a house advantage within a predetermined range. The Examiner offers no facts to show prior casino house advantages are within a predetermined range or associated with a knowledge-based game let alone a combined knowledge-based game and game of chance.

In the context of the present invention, one having ordinary skill in the art would have interpreted the term "house advantage" as a theoretical mean value. *Phillips v. AWH Corp.*, Nos. 03-1269, -1286, 2005 U.S. App. LEXIS 13954 (Fed. Cir. July 12, 2005) (en banc). The volatility of the machine is the distribution (or scatter) about a house advantage. Indeed, the observed advantage differs from the house advantage due a slot's statistical "volatility", which goes to zero as the number of trials goes to infinity. For a finite number of trials, volatility is useful for predicting a machine's performance relative to the theoretical. The conventional slot game has

but one house advantage over all play of the game. However, the predetermined range of the claimed invention is not one house advantage and an associated volatility, but instead is a range of house advantages bounded by a predetermined minimum house advantage to a predetermined maximum house advantage. That is, there are two house advantages that bound the predetermined range. The Examiner's applied references not only support the patentability of the claims, but show that the Examiner has not interpreted the claimed invention from the viewpoint of one having ordinary skill in the art.

The Demar patent only teaches randomness. In other words, a player cannot use knowledge to answer a question. In such randomness, over all play of the game, only one expected value (EV) is generated in the combined play of the bonus games and the underlying game of chance. For example, in the second embodiment of Demar, the expected value for the combined play is 95.05%. Over all play of the game, this is a single value house advantage. See also Demar at Figure 12.

Martinez recognizes that casinos are not in the nonprofit category of business and will not survive without strict attention to the house-advantage concept. See Martinez at page 43. This article also recognizes that slot machines have a **set** house advantage based on **randomness** which is usually 10%. See Martinez at page 42. In other words, one fixed value.

With respect to the Kilby reference, on pages 114-115, Kilby sets forth a statistical breakdown for an IGT slot game. When a slot is played forever, a single fixed house advantage is provided. Until the casino game is played forever, the casino games' actual advantage has volatility about the house advantage: Although each machine has a fixed casino advantage, the actual hold can vary drastically from the theoretical advantage. See Kilby at page 117. Hence, for the above IGT game, the fixed player return is 85.495% over all time. At 1,000 handle pulls



the slot volatility of the IGT game is 54.11% to 116.88% for the player return. After 10,000,000 handle pulls the player return is between 85.18% and 85.81% with a 90% confidence. This is a statistical breakdown based on randomness. Id. In each case, the distribution or scatter is centered on the theoretical house advantage (i.e.,  $(54.11\% + 116.88\%)/2 = (85.18\% + 85.81\%)/2 = 85.495\%$ ). As the number of trials increases, the volatility squeezes down, causing the actual advantage to coincide with the house advantage.

In the claimed invention, however, there are two fixed house advantages at opposite ends of the predetermined range when played forever. One is fixed for a perfect knowledge player playing forever; and the second is fixed for a player who guesses playing forever. Each of these house advantages, in principle, has an associated volatility. The claimed inventions cover a sophisticated novel type of casino game that provides a predetermined range for house advantage that can, in principle based on design choice, also be statistically modeled (as Kilby did for the IGT game) providing the slot volatility at 1,000 handle pulls, at 10,000 handle pulls, etc. At 10,000,000 handle pulls, the house advantage for a theoretical player who guesses over all time would be very close (e.g., within a % point) of a fixed (or set) value at one end of the predetermined range and the house advantage for a theoretical perfect knowledge player who answers correctly over all time would be very close (e.g., within a % point) of a fixed (or set) value at the other end of the predetermined range.

Moreover, as to the inherency of a “house advantage within a predetermined range”, let alone a house advantage being a function of: the player’s expected rate of return for the underlying game of chance; the player’s expected rate of return for the knowledge-based bonus game; the known statistical frequency rate for stopping the underlying game of chance; and the wager, the Examiner has not proffered any factual basis to justify invoking the doctrine of

inherency. Inherency of course requires certainty, not speculation. *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002); *Finnegan Corp. v. ITC*, 180 F.3d 1354, 51 USPQ2d 1001 (Fed. Cir. 1999); *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949 (Fed. Cir. 1999); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994); *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ2d 1746 (Fed. Cir. 1991).

With respect to the Adams I patent, Appellant submits that Adams fails to disclose a house advantage within a predetermined range. The Examiner relied on Adams I as allegedly teaching payouts from a primary and secondary game. See non-final Office action at page 3. The Examiner asserted that playing of a secondary game without affecting the award in the primary games would have been an obvious design choice as allegedly suggested by Adams I. Appellant submits that the Examiner's "matter of design choice" rubric is legally erroneous. Specifically, the Court of Appeals for the Federal Circuit has repeatedly judicially condemned the "matter of design choice" approach to the motivational element. *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995); *In re Gal*, 980 F.2d 717, 25 USPQ2d 1076 (Fed. Cir. 1992); *In re Bezombes*, 420 F.2d 1070, 164 USPQ 387 (CCPA 1970).

Thus, in view of the foregoing, none of the references, alone or in combination, discloses or remotely suggests a house advantage within a predetermined range as required in independent claims 1 and 24. Appellant, therefore, solicits the Honorable Board to reverse the Examiner's rejection of claims 1-15, 24 and 39 under 35 U.S.C. § 103 for at least these reasons.

### Independent Claim 16

The Examiner discusses the limitations of independent claim 16 and its respective dependent claims (17-23), appears on page 6-8 of the non-final Office action and page 4 of the final Office action. Claims 16-23 stand or fall together as a group. The Examiner asserted in the final Office action that the claims features of claims 16-23 are clearly taught by the applied art. The Examiner alleged that using a knowledge-based bonus game as a secondary games in combination with an underlying game of chance is taught by Claypole. The Examiner argued that bonus games are known to augment a players winning and the payout to a player is dependent upon their success during the bonus game play.

Appellant submits that independent claim 16 is patentably distinct over the applied teachings Vancura, Claypole and/or Demar. With respect to a casino games comprising a knowledge-based bonus game integrated with a game of chance, Appellant again submits that the Examiner's proposed modification of Vancura with Claypole amounts to nothing more than a judicially condemned "obvious to try" standard. *In re O'Farrell, supra; In re Fine, supra; In re Dow Chemical Co., supra*. The Examiner has not made the requisite "clear and particular" factual findings as to any specific understanding or specific technological principle which would have realistically impelled one having ordinary skill in the art to modify the gaming machine (with bonusing) disclosed by Vancura to arrive at the claimed invention. *Ruiz v. A.B. Chance Co., supra; Ecolochem Inc. v. Southern California Edison, Co., supra; In re Kotzaab, supra; In re Dembiczak, supra*.

Moreover, independent claim 16 is free from the applied art because it describes a novel knowledge-based casino game wherein the player is paid as follows: paying the player a higher positive bonus amount in units when at least one answer (received from the player in response to

the query in the knowledge-based bonus game) is correct and paying the player a lower positive bonus amount in units when the at least one answer (received from the player in response to the query in the knowledge-based bonus game) is incorrect, the higher and lower positive amounts awarded independently so as not to affect any underlying game of chance award. In other words, during the knowledge-based bonus game, the player is paid a higher positive amount when correctly answering the query and a lower positive amount when the player incorrectly answers the query.

Vancura simply does not teach a knowledge-based bonus game, much less any discussion about payment to a player based on the player's answer to a query in the knowledge-based bonus game, as required in claim 16. Vancura's payment method as described in Embodiment 1, at col. 6, lines 5-40, relates to payment of a positive amount in the secondary slot machine game and, therefore, does not even remotely relate to a knowledge-based bonus game. The Examiner's only motivation to modify Vancura's method is based on Claypole's vague teaching of quiz games in combination with a game of chance. The Examiner concludes that it would be obvious to substitute (i.e. "obvious to try" standard) Vancura's secondary slot machine game with Claypole's quiz game, but fails to set forth with any factual detail how or why one of ordinary skill would have implemented this proposed combination.

The remaining references to Adams II, Freda and Forrest, which were relied upon the Examiner to address dependent claims 17-23, do nothing to remedy the above argued deficiencies of Vancura, Claypole and/or Demar with respect to independent claim 16.

Thus, for the reasons set forth above, it is respectfully submitted that independent claim 16, as well as dependent claims 17-23 are non-obvious over the cited art.

**Independent Claim 27**

Independent claim 27, as well as dependent claims 28-32 and 40 stand or fall together as a group. Independent claim 27 describes the house advantage of the present invention as being set over all play of the casino game as a function of the correctness of at least one answer during the knowledge-based bonus game. None of the cited references provide a casino game where the player plays the underlying game of chance with an expected rate of return, plays the bonus game at an expected rate of return based upon the correctness of the answer from the player so as to provide a house advantage set over play of the casino game.

The Examiner discusses the limitations of independent claim 27 and its respective dependent claims (28-32 and 40), appears on page 8-10 of the non-final Office action and pages 4-5 of the final Office action. In the final Office action at page 4, it was asserted that strict proof is not the standard under 35 U.S.C. § 103, but rather a question of obviousness. The Examiner continued by alleging that the house percentage is set by the house to balance the amount of money taken in by the play of the games with consideration of the player's interest. It was stated by the Examiner that a high house advantage is known to reduce a player's interest in the game since his/her chance of winning is lower. The range, according to the Examiner, is set by the house as a "matter of choice" and will set the percentage at any range even at the expense of the house profit if the intentions are to attract players.

Despite the Examiner assertion that the foregoing is known in the art, the Examiner apparently neglected to inform Appellant where any of the applied references discloses or suggests these arguments. Rather, it appears that the Examiner is once again supporting his conclusions with the Examiner's own expertise instead of the evidence of record and the teachings of the applied art which are required in order to establish a *prima facie* case of

obviousness. Indeed, not one of the references relied upon by the Examiner teaches a knowledge-based bonus game having a house advantage that is set over all play of the casino games as a function of the correctness of at least one answer provided by the player in response to a question generated during play of the knowledge-based bonus game.

Contrary to the Examiner's assertion, the level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308 (Fed. Cir. 1999). Rather, the Federal Circuit has mandated that the references themselves must suggest the combination. *In re Lee*, 237 F.3d 1338, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002). An Examiner cannot use his own conclusions as to what is obvious; the suggestions of obviousness must be found in the references. *Id.* Although the prior art may be capable of being modified the way claimed, there must be a suggestion or motivation in the reference to do so. See *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992). Instead, the Examiner must show reasons why a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. *In re Rouffet, supra*. This showing must be clear and particular. *In re Dembiczak, supra*. Broad conclusory statements, standing alone, are not "evidence". *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578 (Fed. Cir. 1993).

"The factual inquiry whether to combine references must be thorough and searching". *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52 (Fed. Cir. 2001). It must be based on objective evidence of record. *In re Lee, supra*; see also *In re Thrift*, 63 USPQ2d 2002, 2006 (Fed. Cir. 2002). "A showing of a suggestion, teaching, or motivation to combine the prior art reference is an 'essential component of an obviousness holding'" *Brown & Williamson Tobacco*

*Corp. v. Phillip Morris, Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000); quoting *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998).

The factual question of motivation is material to patentability cannot be dispensed with by a generalized assertion, as the Examiner has done in the instant case. It is improper, in determining whether a person of ordinary skill would have been led to the asserted combination of references, simply to “[use] that which the inventor taught against its teacher.” *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983).

In view of this overwhelming precedent, it is submitted that the Examiner’s proffered motivation for combination of the references is conclusory and legally insufficient to support a *prima facie* case of obviousness under 35 U.S.C. § 103(a). Appellant, therefore, solicits the Honorable Board to reverse the Examiner’s rejection of claims 27-32 and 40 under 35 U.S.C. § 103.

#### **Independent Claims 33, 36 and 43**

The Examiner discusses the limitations of independent claims 33, 36 and 43 and dependent claims 34-35, appears on pages 10-11 of the non-final Office action and page 5 of the final Office action. Independent claims 33, 36 and 43, as well as dependent claims 34-35 stand or fall together as a group.

The Examiner relies upon the doctrine of inherency to support the conclusion that the expected rate of return “inherently varies” throughout the play of the game depending upon the ability of the players, as allegedly suggested by Martinez or Kilby.

However, Martinez recognizes that casinos are not in the nonprofit category of business and will not survive without strict attention to the house-advantage concept. See Martinez at

page 43. This article also recognizes that slot machines have a **set** house advantage based on **randomness** which is usually 10%. See Martinez at page 42. In other words, **one** fixed value.

With respect to the Kilby reference, on pages 114-115, Kilby sets forth a statistical breakdown for an IGT slot game. When a slot is played forever, a single fixed house advantage is provided. Until the casino game is played forever, the casino games' actual advantage has volatility about the house advantage: Although each machine has a fixed casino advantage, the actual hold can vary drastically from the theoretical advantage. See Kilby at page 117. Hence, for the above IGT game, the fixed player return is 85.495% over all time. At 1,000 handle pulls the slot volatility of the IGT game is 54.11% to 116.88% for the player return. After 10,000,000 handle pulls the player return is between 85.18% and 85.81% with a 90% confidence. This is a statistical breakdown based on randomness. *Id.* In each case, the distribution or scatter is centered on the theoretical house advantage (i.e.,  $(54.11\% + 116.88\%)/2 = (85.18\% + 85.81\%)/2 = 85.495\%$ ). As the number of trials increases, the volatility squeezes down, causing the actual advantage to coincide with the house advantage.

In the claimed invention, however, there are two fixed house advantages. Independent claim 33 discloses, in pertinent part, a method including the step of varying the knowledge-based game expected rate of return. The varying of the knowledge-based game expected rate of return includes obtaining first and second limits over all play of the casino game. The first limit is based upon all answers from the player in the knowledge-based game being correct and the second limit based upon all answers from the player in the knowledge-based game always being guessed at. None of the references, alone or in combination disclose these limitations.

Independent claim 36 describes a house advantage for the casino game, in units, varies in a range for all play of the casino game. The house advantage is based on the wager, the negative



player (guesses at all answers) expected return, the known statistical frequency, and the positive player (answers are all correct) expected return, with the house advantage being equal to or greater than zero. The range of claim 36 is determined by the first and second set limits.

Independent claim 43 describes a method which includes providing a house advantage for the casino game which is a function at least of the first house advantage and the variable second house advantage. The casino game house advantage falls within a range between a minimum set value and a maximum set value over all play of the knowledge-based game. The maximum casino game house advantage occurs when random guessing occurs by the player over all play of in the knowledge-based game. The minimum casino game house advantage occurs when perfect-knowledge play occurs by the player over all play of the knowledge-based game.

Thus, for each of independent claims 33, 36 and 43, one limit is present for a perfect knowledge player that answers all answers correctly and the second is present for a player who always guesses.

The Examiner has not proffered any factual basis to justify invoking the doctrine of inherency based on either Martinez or Kilby. Inherency, requires both certainty and art-recognition, neither of which the Examiner has shown. *Elan Pharmaceuticals, Inc. v. Mayo Foundation, supra*; *Crown Operations International Ltd. v. Solutia Inc., supra*.

Moreover, the designing of a successful knowledge-based bonus game in combination with an underlying game of chance required negotiating and solving two formidable problems:

(1) the game must award a player who correctly answers yet ensure the house commercial viability by preventing a perfect knowledge player or a team of players working together from cleaning out or bankrupting the house (page 18 of the written description, lines 5 through 8); and

(2) the game must be fair to a player with no knowledge (such as a player guessing at answers), i.e., the game must not present a prohibitively high house advantage, because players must be encouraged to continue to play even if they are not always correct in their responses (page 17 of the written description, lines 1 through 4).

The present invention, unlike any of the references applied by the Examiner, addresses and solves the first problem by providing a game which need not be monitored and need not monitor itself, because a set house advantage is established for the perfect player for playing the game. The second problem is addressed and solved by providing a set house advantage for the player who always guesses at the answer. As such, the problems addressed and solved by the claimed invention merits consideration with regard to the nonobviousness issue. *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ2d 1333 (Fed. Cir. 1993); *In re Nomiya*, 509 F.2d 566, 184 USPQ 607 (CCPA 1975). It is well settled that all evidence impacting nonobviousness must be given consideration. *Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 57 USPQ2d 1161 (Fed. Cir. 2000); *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 42 USPQ2d 1378 (Fed. Cir. 1997); *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

Appellant would further argue as an indicium of nonobviousness the long-felt need and failure of others to find a solution to the problem of the perfect knowledge player. These unsuccessful attempts to solve the perfect knowledge player problem underscore the elegant sophistication of the present invention which is a self-contained machine that conforms to U.S. regulations requiring random events and encouraging players with limited knowledge while protecting the house against a perfect knowledge player. *Ecolochem Inc. v. Southern California*

*Edison, Co.* 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000); *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

Thus, for the reasons set forth above, Appellant submits that independent claims 33, 36, 43, as well as dependent claims 34-35, are non-obvious over the cited art. Appellant, therefore, solicits the Honorable Board to reverse the Examiner's rejection of claims 33-36 and 43 under 35 U.S.C. § 103.

### VIII. Conclusion

Based upon the arguments submitted supra, Appellant submits that the Examiner's rejection under 35 U.S.C. § 103 is factually and legally erroneous. Appellant, therefore, solicits the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. 1.17 and 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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## IX. CLAIMS APPENDIX

1. (Previously Presented) A method for playing a casino game comprising:

receiving a wager from a player in the casino game to play both an underlying game of chance and a knowledge-based bonus game, the knowledge-based bonus game interconnected with the underlying game of chance to at least receive a bonus condition signal from the underlying game of chance, said wager having a value in units,

playing the underlying game of chance, the player having an expected return in units in the play of the underlying game of chance based on the wager,

stopping play of the underlying game of chance at a known statistical frequency rate to initiate the knowledge-based bonus game in response to the received bonus condition signal thereby continuing play of the casino game,

playing the knowledge-based bonus game using answers from the player after the underlying game of chance stops, the player having an expected rate of return in units in the knowledge-based game based at least on the correctness of the player's answers, the play of the knowledge-based bonus game not affecting any award made to the player in the underlying game of chance, the casino game having a house advantage within a predetermined range, the house advantage for the casino game a function of the player's expected rate of return in units in the underlying game of chance, the player's expected rate of return in units for the knowledge-based bonus game, the known statistical frequency rate for stopping the underlying game of chance, and the units of the wager; the predetermined range having set limits for all play of the casino game.

2. (Original) The method of claim 1 wherein the underlying game of chance is a slot game.

3. (Original) The method of claim 1 further comprising restarting the play of the underlying game of chance when the play of the knowledge-based bonus game is over.

4. (Previously Presented) The method of claim 1 wherein stopping the underlying game of chance is based upon said bonus condition signal occurring in the play of the underlying game of chance.

5. (Previously Presented) The method of claim 1 wherein stopping the underlying game of chance is based upon said bonus condition signal occurring unrelated to the play of the underlying game of chance.

6. (Original) The method of claim 1 wherein stopping of the underlying game of chance is randomly chosen at the known frequency rate.

7. (Previously Presented) The method of claim 1 wherein playing the knowledge based bonus game comprises:

providing queries with answers and wherein the player's expected rate of return for the knowledge-based bonus game is one of the set limits in the predetermined range based upon all answers in the knowledge-based bonus game are always correct.

8. (Previously Presented) The method of claim 1 wherein said playing the knowledge-based bonus game comprises:

queries with answers and wherein the player's expected rate of return for the knowledge-based bonus game corresponds to one of the set limits in the predetermined range based upon all answers in the knowledge-based bonus game are always guessed at.

9. (Original) The method of claim 1 wherein the predetermined range is always positive.

10. (Original) The method of claim 1 wherein playing the knowledge-based game further comprises:

- (a) providing at least one query to the player in the knowledge-based game,
- (b) receiving at least one answer from the player in response to the provided query,
- (c) paying the player based upon the at least one answer.

11. (Original) The method of claim 10 wherein the at least one query is a multiple choice question having only one of the multiple choices correct.

12. (Previously Presented) The method of claim 10 wherein the at least one query is a query requiring a proximate answer.

13. (Original) The method of claim 10 wherein the at least one query is a multiple choice question having at least one of the multiple choices correct.

14. (Original) The method of claim 10 wherein the at least one query is a puzzle having a forced outcome.

15. (Original) The method claim of claim 10 wherein the at least one query is a true/false question.

16. (Previously Presented) A method for a player playing a casino game comprising:  
receiving a wager from the player in the casino game to play both an underlying game of chance and a knowledge-based bonus game, the knowledge-based bonus game interconnected with the underlying game of chance to at least receive a bonus condition signal from the underlying game of chance, said wager having a value in units,

playing the underlying game of chance,

paying the player a game of chance award in units when the player wins in the underlying game of chance,

ending the casino game when the player is paid in the underlying game of chance,

stopping the underlying game of chance when a bonus condition signal occurs in the underlying game of chance,

playing the knowledge-based bonus game using answers from the player only after the underlying game of chance stops based on the occurrence of the bonus condition signal so as to continue play of the casino game, the play of the knowledge-based bonus game not affecting any award made to the player in the underlying game of chance, the step of playing the knowledge-based game further comprising the steps of:

providing at least one query to the player in the knowledge-based bonus game,  
receiving at least one answer from the player in response to the provided query,  
paying the player a higher positive bonus amount in units when the at least one answer is correct,

paying the player a lower positive bonus amount in units when the at least one answer is incorrect, the higher and lower positive amounts awarded independently so as not to affect any underlying game of chance award,

ending the casino game when the player is paid in the knowledge-based game of chance.

17. (Previously Presented) The method of claim 16 wherein the higher and lower positive bonus amounts are greater than the wager.

18. (Previously Presented) The method of claim 16 further comprising:  
providing another query to the player when the player is paid the higher bonus amount;  
receiving at least one answer from the player in response to the provided another query,  
paying the player a higher second positive bonus amount in units when the player correctly answers the provided another query,

paying the player a lower second positive bonus amount in units when the player incorrectly answers the provided another query.

19. (Previously Presented) The method of claim 18 wherein said providing another query provides a query more difficult than the at least one query.



20. (Previously Presented) The method of claim 16 further comprising:  
receiving a double or nothing input from the player during play of the casino game,  
paying the player double the higher positive bonus amount in units when the player  
correctly answers the at least one query in response to the received input,  
not paying the player the lower positive amount when the player incorrectly answers the  
at least one query.

21. (Previously Presented) The method of claim 16 wherein paying the player a  
higher positive bonus amount pays different higher positive bonus amounts based on a function  
of how close the player answer is to the correct answer.

22. (Original) The method of claim 16 wherein each at least one query has a plurality  
of correct and incorrect answers.

23. (Previously Presented) The method of claim 16 further comprising:  
receiving another answer to the at least one query when the received at least one answer  
is incorrect,  
paying the lower positive bonus amount when the received another answer is incorrect,  
paying an amount between the higher and lower positive bonus amounts when the  
received another answer is correct.

24. (Previously Presented) A method for a player playing a casino game, the method  
comprising:

receiving a wager from the player in the casino game to play both an underlying game of chance and a knowledge-based bonus game, the knowledge-based bonus game interconnected with the underlying game of chance to at least receive a bonus condition signal from the underlying game of chance,

playing the underlying game of chance, the player having an expected rate of return based on the wager for play of the underlying game of chance,

stopping play of the underlying game of chance at a known statistical frequency rate in order to initiate the knowledge-based bonus game in response to the received bonus condition signal,

separately playing the knowledge-based bonus game when the underlying game of chance stops at said known statistical frequency rate so as to continue the play of the casino game, the play of the knowledge-based game not affecting any awards made to the player in the underlying game of chance, said known statistical frequency rate being greater than zero and less than one,

the step of separately playing the knowledge-based bonus game at least having the steps of:

(a) providing at least one query to the player in the knowledge-based bonus game,

(b) receiving at least one answer from the player in response to the provided at least one query,

(c) paying the player based upon the correctness of the at least one answer by the player, the player having an expected rate of return for play of the knowledge-based bonus game, the aforesaid rate of return at least a function of the correctness of the at least one answer,

the casino game having a house advantage in a predetermined range having two set limits based on the player's expected rate of return for the underlying game of chance, the player's expected rate of return for the knowledge-based bonus game, the known statistical frequency rate for stopping the underlying game of chance, and the wager; the house advantage having at least one of the two set limits based on all at least one answers for play in the knowledge-based game being always correct, the set limit being the same for all play of the casino game.

Claims 25-26 (Cancelled)

27. (Previously Presented) A method for a player playing a casino game comprising:  
 receiving a wager from the player in the casino game to play both an underlying game of chance and a separate knowledge-based bonus game, the knowledge-based bonus game interconnected with the underlying game of chance to at least receive a bonus condition signal from the underlying game of chance,  
 playing the underlying game of chance,  
 paying the player a game of chance award when the player wins during play of the underlying game of chance,  
 ending the casino game when the player is paid the game of chance award,  
 separately playing the knowledge-based bonus game using at least one answer from the player only after the underlying game of chance stops to initiate the separate knowledge-based bonus game in response to the received bonus condition signal thereby continuing the play of the casino game, the play of the knowledge-based bonus game not affecting the game of chance award,

always paying the player a bonus award as a function of the correctness of the at least one answer during the play of the knowledge-based bonus game, the bonus game award paid independently from the game of chance award,

the casino game having a house advantage that is set over all play of the casino game as a function of said correctness of the at least one answer, said house advantage being equal to or greater than zero.

28. (Previously Presented) The method of claim 27 further comprising setting said house advantage equal to  $-(R+fB-X)/X$ , wherein the wager has a value,  $X$ , in units, and wherein the player has an expected return,  $R$ , in units in the step of paying during play of the underlying game and an expected return,  $B$ , in units in the step of paying during play of the knowledge-based bonus game, and wherein the underlying game stops at a known frequency rate,  $f$ .

29. (Previously Presented) The method of claim 27 further comprising setting the house advantage at a limit, for all play of the casino game, when the answers are always correct.

30. (Previously Presented) The method of claim 27 further comprising setting the house advantage at a limit, for all play of the casino game, when the answers are always guessed at.

31. (Previously Presented) The method of claim 28 further comprising stopping said underlying game at a periodic frequency rate.

32. (Previously Presented) The method of claim 28 further comprising randomly stopping said underlying game at a statistical frequency over time.

33. (Previously Presented) A method for a player playing a casino game comprising:  
receiving a wager from the player to play the casino game,  
playing a slot game in the casino game having an expected rate of return to the player in response to receiving the wager,

ending the casino game when the player receives a slot game payout based on the expected rate of return for the slot game,

stopping play of the slot game at a known statistical frequency rate to generate a bonus condition signal,

separately playing a knowledge-based game connected to the slot game in the casino game using answers from the player only after the slot game is randomly stopped to continue play of the casino game, the knowledge-based game interconnected with the slot game to at least receive the bonus condition signal from the slot game, the play of the knowledge-based game not affecting any awards made to the player in the underlying slot game, the knowledge-based game having an expected rate of return to the player based at least on the correctness of the answers,

varying the knowledge-based game expected rate of return, the varying knowledge-based game expected rate of return obtaining first and second limits over all play of the casino game, the first limit based upon all answers from the player in the knowledge-based game being correct and the second limit based upon all answers from the player in the knowledge-based game always being guessed at.

34. (Previously Presented) The method of claim 33 wherein said varying comprises periodically changing said knowledge-based game expected rate of return over time.

35. (Previously Presented) The method of claim 33 wherein said varying comprises randomly varying the knowledge-based game expected rate of return over time.

36. (Previously Presented) A casino game comprising:

- a wager in units for playing the casino game,
- a game of chance in the casino game, said game of chance started in response to the wager, the game of chance comprising:
  - a random number generator having a random output,
  - a negative player expected return in units for all play of the game of chance based on the wager and the random output,
  - a separate knowledge-based bonus game in the casino game, said knowledge-based bonus game randomly activated by the random output at a known statistical frequency for play of the knowledge-based bonus game, the play of the knowledge-based bonus game not affecting any awards made to the player in the underlying game of chance, the game of chance interconnected with the knowledge-based bonus game, said knowledge-based game comprising:
    - a memory having a plurality of queries and a plurality of correct and incorrect answers for each of the plurality of queries,
    - an input for receiving player answers to the plurality of queries,
    - a positive player expected return in units for all play of the knowledge-based bonus game based on the wager and based on the correctness of the received players answers to

the plurality of correct and incorrect answers, the positive player expected return having a first limit when all received player answers are correct and a second limit when all received player answers are guessed at, the positive player expected return of the knowledge-based game independent of the negative player expected return of the game of chance,

a house advantage for the casino game, in units, varying in a range for all play of the casino game, the house advantage based on the wager, the negative player expected return, the known statistical frequency, and the positive player expected return, the house advantage being equal to or greater than zero, the range determined by the first and second set limits.

Claims 37-38 (Cancelled)

39. (Previously Presented) The method of claim 1 further comprising setting the limits of said predetermined range at about 5% and about 15%, respectively.

40. (Previously Presented) The method of claim 27 further comprising assuring the player of a net win for each play of said knowledge-based bonus game.

Claims 41-42 (Cancelled)

43. (Previously Presented) A method for playing a casino game, including an underlying game of chance and a knowledge-based game, the method comprising:

receiving a wager from a player in the casino game,

playing the underlying game of chance, the underlying game of chance having a first house advantage,

playing said knowledge-based game when a bonus game event in said underlying game of chance occurs, the underlying game of chance interconnected with the knowledge-based bonus game to form the casino game, said knowledge-based game having a second house advantage which varies based on the correctness of answers provided by said player, wherein any payout from said underlying game of chance and any payout in said knowledge-based game are independent of one another,

providing a house advantage for said casino game which is a function at least of said first house advantage and said variable second house advantage, said casino game house advantage falling within a range between a minimum set value and a maximum set value over all play of said knowledge-based game,

incurring said maximum casino game house advantage when random guessing occurs by said player over all play of in said knowledge-based game,

incurring said minimum casino game house advantage when perfect-knowledge play occurs by said player over all play of said knowledge-based game, and

ensuring that said incurred minimum casino game house advantage is positive, thereby maintaining profitability for an owner of said casino game throughout said casino game house advantage range.



**X. EVIDENCE APPENDIX**

Not applicable.

**XI. RELATED PROCEEDINGS APPENDIX**

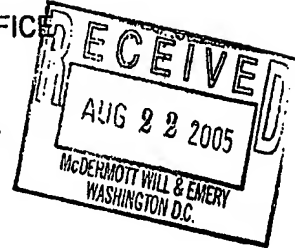
Prior decisions by the Board of Patent Appeals and Interferences for both U.S. Patent Application Serial No. 09/372,560 (the '560 application) and U.S. Patent Application Serial No. 09/875,753 (the '753 application) are attached hereto.



The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES



Ex parte OLAF VANCURA

Appeal No. 2005-1374  
Application No. 09/875,753



ON BRIEF

Before RUGGIERO, DIXON, and LEVY, Administrative Patent Judges.  
DIXON, Administrative Patent Judge.

#### DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 3, 8-10, 19, 24, 25 and 30, which are all of the claims pending in this application.

We REVERSE and make a NEW GROUNDS OF REJECTION.

## **BACKGROUND**

Appellant's invention relates to a knowledge-based casino game and method therefor. An understanding of the invention can be derived from a reading of exemplary claims 1, 19 and 25, which appear below.

1. A method for playing a casino game comprising the steps of:

receiving a wager,

playing an underlying game of chance,

playing a knowledge-based bonus game using answers from a player in combination with the underlying game of chance, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range.

19. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of:

receiving a wager,

playing the underlying casino game of chance, stopping play of the underlying casino game of chance,

playing the knowledge-based bonus game when the underlying casino game of chance is stopped, the steps of playing the knowledge-based game at least having the steps of:

(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query,

(c) paying the player based upon the at least one answer by the player providing a house advantage within a predetermined range for the

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Application No. 09/875,753

combined knowledge-based bonus game and underlying casino game, the predetermined range having a set limit based at least upon all answers to all queries in the knowledge-based game are always correct and the wager.

25. A method for playing a combined knowledge-based bonus game with an underlying casino game of chance, the method comprising the steps of: playing the underlying casino game of chance, playing the knowledge-based bonus game in combination with the underlying game, the steps of playing the knowledge-based game at least having the steps of:

(a) providing at least one query to the player in the knowledge-based game,

(b) receiving at least one answer from the player in response to the provided at least one query, the combined knowledge-based bonus game with the underlying casino game having a house advantage in a range from a first set limit based on all answers to all queries are correct and a second limit based on all answers to all queries are guessed.

The prior art of record relied upon by the examiner in rejecting the appealed claims:

Thompson	5,178,545	Jan. 12, 1993
Keller, Jr.	5,718,429	Feb. 17, 1998
Walker et al. (Walker)	6,193,606	Feb. 27, 2001
		(filed Jun 30, 1997)
Evans	GB 2,197,974	Jun. 2, 1988
Claypole et al. (Claypole)	GB 2,262,642	Jun. 23, 1993

The prior art relied upon by the Board<sup>1</sup> in rejecting claims 1, 3, and 9 below:

Walker et al. (Walker)	6,193,606	Feb. 27, 2001
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<sup>1</sup> We note that no dates are provided by the examiner with the references attached to the Examiner's Answer. The dates presumed are from the internet. The examiner should determine the correct dates and fill out a PTO-892 with correct information.

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Application No. 09/875,753

Vancura, Smart Casino Gambling: How to Win More and Lose Less, Chapter 2: How Do Casinos Make Money, pp. 23-33, Index Publishing Group, Inc. (1999-presumed.)

Martinez, Managing Casinos: A Guide for Entrepreneurs, Management Personnel and Aspiring Managers, pp. 40-43, Barricade Books. (1995-presumed.)

Kilby et al. (Kilby), Casino Operations Management, John Wiley & Sons, Inc., Chapter 7: Slot Management, pp. 103-127 and Chapter 13: Table Game Hold as a Management Tool, pp. 213-225. (1998-presumed.)

Claims 1, 3, 8-10, 18, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 112, first paragraph as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1, 3, 8, 9, and 18 stand rejected under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3, and 18 stand rejected under 35 U.S.C. § 102 as being anticipated by Keller or Evans.

Claims 1, 3, 8-10, 18, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 102 as being anticipated by Walker.

Claims 1, 3, 8-10, 18, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 102 as being anticipated by Claypole.

Claims 8-10, 19, 24, 25, and 30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Keller or Evans in view of Thompson.

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Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 17, mailed May 16, 2003) for the examiner's reasoning in support of the rejections, and to appellant's brief (Paper No. 15, filed Feb. 24, 2002) and reply brief (Paper No. 18, filed Jul 10, 2003) for appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Appellant has elected to group the claims into three separate groupings. Therefore, we will select a single claim from each group as the representative claim. Only those arguments actually made by appellants have been considered in this decision. Arguments that appellant could have made but chose not to make in the brief have not been considered. We deem such arguments to be waived by appellant [see 37 CFR § 41.37(c)(1)(vii) effective September 13, 2004 replacing 37 CFR § 1.192(a)]. We will consider the appealed claims separately only to the extent separate arguments for patentability are presented. Any dependent claim not separately argued will stand or fall with its base claim. *Note In re King*, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); *In re Sernaker*, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983).

**35 U.S.C. § 112, FIRST PARAGRAPH**

As our reviewing court states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." **Texas Digital Sys., Inc. v. Telegenix, Inc.**, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002) **cert. denied**, 123 S.Ct. 2230 (2003).

Moreover, the intrinsic record also must be examined in every case to determine whether the presumption of ordinary and customary meaning is rebutted. Indeed, the intrinsic record may show that the specification uses the words in a manner clearly inconsistent with the ordinary meaning reflected, for example, in a dictionary definition. In such a case, the inconsistent dictionary definition must be rejected. [Citation omitted.] ("[A] common meaning, such as one expressed in a relevant dictionary, that flies in the face of the patent disclosure is undeserving of fealty."); **Liebscher v. Boothroyd**, 258 F.2d 948, 951, 119 USPQ 133, 135 (CCPA 1958) ("Indiscriminate reliance on definitions found in dictionaries can often produce absurd results."). In short, the presumption in favor of a dictionary definition will be overcome where the patentee, acting as his or her own lexicographer, has clearly set forth an explicit definition of the term different from its ordinary meaning. [Citations omitted.] Further, the presumption also will be rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction,



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representing a clear disavowal of claim scope. See **Teleflex Inc. v. Ficosa North America Corp.**, 299 F.3d 1313, 1324, 63 USPQ2d 1374, 1380. **Texas Digital Sys., Inc v. Telegenix, Inc.**, 308 F.3d 1193, 1204, 64 USPQ2d 1812, 1819.

Our reviewing court has recently clarified the usage of intrinsic and extrinsic evidence for claim interpretation in **Phillips v. AWH Corporation**, Fed. Cir. Appeals 03-1269, -1286, Slip Opinion at pages 30-31. (July 12, 2005). The Court stated that

In Vitronics, [**Vitronics Corp. v. Conceptronic, Inc.**, 90 F.3d 1576, 39 USPQ2d 1573 (Fed. Cir. 1996)] this court grappled with the same problem and set forth guidelines for reaching the correct claim construction and not imposing improper limitations on claims. 90 F.3d at 1582. The underlying goal of our decision in Vitronics was to increase the likelihood that a court will comprehend how a person of ordinary skill in the art would understand the claim terms. See id. at 1584. In that process, we recognized that there is no magic formula or catechism for conducting claim construction. Nor is the court barred from considering any particular sources or required to analyze sources in any specific sequence, as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence. See id. at 1583-84; Intel Corp. v. VIA Techs., Inc., 319 F.3d 1357, 1367 (Fed. Cir. 2003).

Appellant has clearly identified and specifically defined certain terms in the specification and we are obligated to interpret these terms as specifically defined and give those other limitations their ordinary meaning.

The Examiner appears to be requiring that Appellants set forth some special indication that they are acting as their own lexicographer or providing a special definition for the phrase "in combination with." We find there is no such requirement in the statutes, rules, or case law. Rather, it is only required that any special meaning

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assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." **Multiform Desiccants Inc. v. Medzam Ltd.**, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). **See also Process Control Corp. v. HydReclaim Corp.**, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

We find no special definition or need therefor in the present disclosure and claims.

The examiner maintains that the claim language "in combination with" implies that the game of chance and the trivia game are played simultaneously rather than sequentially as disclosed in the specification. (Answer at pages 2-4.) Appellant argues that the examiner has not presented a *prima facie* case of a lack of enablement.<sup>2</sup> (Brief at pages 6-15.) Giving the phrase its ordinary meaning, we find that "combination" means the action of combining two or more different things in some manner. The examiner maintains that "[t]his is a scope of claim problem." (Answer at page 3.) While we agree with the examiner that there is a scope of claim problem with appellant's claim language, we find that the claim language is quite broad, and we shall address that issue with respect to 35 U.S.C. § 103 in our new grounds of rejection.

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<sup>2</sup> Additionally, appellant argues that the examiner has not clearly set forth whether the grounds of rejection is based upon the written description requirement or the enablement requirement. (Brief at pages 6-15.) We find that the examiner had used varied terminology that may have caused confusion, but since the examiner had incorporated the prior rejection based upon enablement, we find it clear that the rejection has remained a rejection based upon enablement and that any time appellant may have clarified the basis of the rejection with a telephone call to the examiner. We find no lack of due process on the record.

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From our review of appellant's specification, we find the specification to have adequate disclosure to enable one skilled in the art to make and/or use the claimed invention. While the examiner has identified a perceived problem with whether the two games are played simultaneously or sequentially, we find that either way, it is the computation and setting of the house advantage so as to be within a preset range for the two outcomes/results of the two individual games. The two outcomes produce a desirable advantage for the house. We find that the language of independent claim 1 while broad, has been adequately described to enable one skilled in the art to make and/or use the claimed invention. Therefore, we cannot sustain the rejection of independent claim 1 and its dependent claims. Similarly, we find adequate disclosure for further limited independent claims 19 and 25, and we will not sustain the rejection of independent claims 19 and 25 and their dependent claims.

**35 U.S.C. § 112, SECOND PARAGRAPH**

After reviewing Appellant's disclosure, it is apparent to us that the claim language refers to any combination of a game of chance and a knowledge-based trivia game as these two terms have been clearly defined in appellant's specification at page 6. While the claims are perhaps broader by referring to the two games "in combination with" each other rather than sequentially or simultaneously, we find no uncertainty or lack of specificity exists as asserted by the Examiner. Similarly, while the use of the terminology "in combination with" or "combined" are broad recitations, we find no

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ambiguity in the use of such language. The breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 692, 169 USPQ 597, 600 (CCPA 1971).

It is our view that the skilled artisan, having considered the specification in its entirety, would have no difficulty ascertaining the scope of the invention recited in independent claim 1 and its associated dependent claims. Therefore, the rejection of claims 1, 3, 8, 9, and 18 under the second paragraph of 35 U.S.C. § 112 is not sustained.<sup>3</sup>

### **35 U.S.C. § 102**

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

*Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), **cert. denied**, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), **cert. denied**, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it." While all elements of the claimed invention must appear in a single reference, additional references may be used to interpret the anticipating

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<sup>3</sup> While the examiner has not included dependent claim 10 which includes the same limitations as independent claim 1, we would similarly reverse a rejection of this claim on the same basis.

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reference and to shed light on its meaning, particularly to those skilled in the art at the relevant time. **See Studiengesellschaft Kohle v. Dart Indus., Inc.**, 726 F.2d 724, 726-727, 220 USPQ 841, 842-843 (Fed. Cir. 1984).

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. **RCA Corp. v. Applied Digital Data Systems, Inc.**, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); **cert. dismissed**, 468 U.S. 1228 (1984); **W.L. Gore and Associates, Inc. v. Garlock, Inc.**, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), **cert. denied**, 469 U.S. 851 (1984).

We consider first the examiner's 35 U.S.C. § 102 rejection of claim 1 based upon Keller, Evans, Walker, and Claypole. With respect to independent claim 1, the representative claim for Appellant's first suggested grouping of claims subject to this rejection, the examiner indicates how the various limitations read on the recited limitations and relies upon inherency with respect to the lack of any disclosure of a house advantage or a house advantage "within a predetermined range." (Answer at pages 5-8.)

After reviewing the four references in light of the arguments of record, we are in agreement with the Examiner that Appellant's arguments are not commensurate with the scope of representative claim 1 and merely reiterate the language of the claims

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repeatedly. In our view, Appellant's arguments improperly attempt to narrow the scope of the claim by implicitly adding disclosed limitations which have no basis in independent claim 1. **See In re Morris**, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997).

"Deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" **In re Zurko**, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Furthermore, "the Board's findings must extend to all material facts and must be documented on the record, lest the 'haze of so-called expertise' acquire insulation from accountability." **In re Lee**, 277 F.3d 1338, 1345, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002). Here, we find the Examiner's arguments to be supported merely by the Examiner's own expertise instead of the evidence of record and the teachings of prior art which are required in order to establish a **prima facie** case of anticipation or obviousness.

On page 5 of the answer, the examiner refers the house advantage as a fundamental truth along with its variables. We disagree with the examiner's conclusion and find that while well known, the designer need not always design or program the casino game to have an advantage to the house whereas a game or machine may be used as a noise maker or machine to entice players into the casino thereby having a house disadvantage, but paying dividends to the house by advertising or enticing others to start to play. On page 16, of the answer, the examiner refers to references that have not been applied in the rejection under appeal. These references have been given no

consideration since they were not included in the statement of the rejection or eligible in a combination under 35 U.S.C. § 102. **See Ex parte Raske**, 28 USPQ2d 1304, 1305 (Bd. Pat. App. & Int. 1993).

Here, we find the Examiner's arguments to be supported merely by the Examiner's own expertise instead of the evidence of record and the teachings of prior art which are required in order to establish a *prima facie* case of anticipation. Accordingly, we do not sustain the 35 U.S.C. §§ 102 and 103 rejections of any of claims. A discussion of the applied prior art is below.

#### **WALKER**

While Walker teaches a combination of a slot machine and a trivia game with the ability to access higher rewards (Walker abstract), we find that Walker does not teach the use of a house advantage within a predetermined range as required by the language of all of the independent claims. Walker teaches that the payoff from the game of chance is either raised or reduced based upon a correct or incorrect answer to the trivia question. From our review of the teachings of Walker, we find that Figure 10 teaches that the house advantage or the payoff would vary. Therefore, we find that the payoff would be variable for the game of chance and would be different for the combination of the game of chance with the trivia game. Therefore, there would have been a range of payouts since it would change for different levels of participation.

We find that the examiner makes one material error with respect to "casino games" that these games of chance ALL have a consideration of house

percentage/advantage and that it is "inherent" and a "fundamental truth." (Answer at page 5.) While it is true that house percentage/advantage is essential to the financial well being of a casino, we do not find that ALL machines and games must "necessarily" have a positive house advantage since some machines are used as noise makers and used as attractions rather than as moneymakers. While we can agree that house advantage is a consideration, we cannot agree with the examiner that the house advantage would be within a predetermined range and that range would have set limits based on the correctness of the answers to the trivia questions as recited in independent claim 1. Therefore, we cannot sustain the rejection of independent claims 1, 19, and 25 and their dependent claims based on Walker.

Additionally, we note that the examiner has argued throughout the prosecution that many of the features of the claimed invention are old and well known or known in the art, but we note that one of the requirements to support a rejection under 35 U.S.C. § 102 is that a single prior art reference must teach or disclose the totality of the claimed invention. Therefore, the mere fact that certain facts were old and well known in the (pertinent) art is not sufficient to support a finding of anticipation unless those additional facts or features **MUST NECESSARILY** have been present in the applied reference or teaching. Additionally, the examiner cites "Smart Casino Gambling," by Olaf Vancura that "almost all games enjoy[s] a positive expectation" to support a finding that the house advantage was known and present. (Answer at page 16.) Here, we agree with the quotation that almost all games enjoy a positive house advantage, but



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not necessarily all games. Therefore, we find that it need not be inherent, but may or may not have been obvious that it is desirable to have a positive house advantage in all or most of the casino games. Accordingly, we cannot sustain the rejection of the independent claims based upon the teachings of Walker since Walker does not teach all of the claimed limitations.

### **CLAYPOLE**

While Claypole teaches the use of game of skill, such as a quiz game, (Claypole at pages 3, 4, and 7), Claypole does not specifically address that the outcome of the combination of game of chance and game of skill would have a house advantage within a predetermined range. From our review of the teachings of Claypole, we find no clear discussion that there is a house advantage within a predetermined range. From our review of the Claypole reference, we find that Claypole is silent as to the payoffs and the house advantage. We find Claypole to be a general teaching of multiple variations on combined games with little detail thereto. The examiner again maintains that it would be inherent that the house advantage would have been present. The examiner maintains that "[e]ach of the applied references inherently have a predetermined range and the range that is deemed acceptable to commercial viability is subjective." (Answer at page 8.) We agree with the examiner in general, but find within the reference neither a teaching of a house advantage within a predetermined range with nor a teaching of the house advantage being any more than a singular value. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent

within the teachings of Claypole. Accordingly, we cannot sustain the rejection of the independent claims based upon the teachings of Claypole since Claypole does not teach all of the claimed limitations.

#### **KELLER**

Keller teaches the combination of the game of chance tied by the use of a payoff of a non-monetary token which may only be used to obtain access to a physical or mental game of skill. If the player is successful in the game of skill, the individual is awarded a prize based upon the indicium on their token. Here, we agree with appellant that the Keller game combination is more of a combination for entertainment in areas with limited ability to play games of chance for monetary gain. (Brief at pages 21 and 22.) Appellant argues that Keller does not teach a "casino game," but rather is a bifurcated arcade game (Brief at page 23.) While we agree with appellant concerning the payoff from the game of chance in tokens in Keller, we find no limitation on what the payoff of the game of chance must be in the instant claims. Here, Keller has two separate and different payoffs and the winning token in the game of chance must be used as an entry into the game of skill. Therefore, Keller teaches the use of two payoffs, but requires that first payoff to be used to enter the game of skill. While it is not the same as in appellant's disclosed method, we agree with the examiner that it is sufficient to meet the limitations of the independent claim 1 with respect to the steps of playing a game.

What we do not find is any discussion of house advantage in the teachings of Keller. Again, the examiner maintains that one skilled in the art would have recognized that the casino game of Keller would be profit driven and the game is considered to inherently have a house advantage within a predetermined range. (Answer at page 11.) Again, we agree with appellant that the examiner has gone beyond the express disclosure of Keller and made assumptions which do not have to necessarily occur. Here, the examiner does not identify why the house advantage would have necessarily been within a range or rather a singular value. Therefore, we cannot agree with the examiner that the claimed house advantage within a predetermined range would have been inherent within the teachings of Keller. Accordingly, we cannot sustain the rejection of independent claim 1 and dependent claims 3 and 18 based upon the teachings of Keller since Keller does not teach all of the claimed limitations.

#### **EVANS**

Again, as with the teachings of Walker, Claypole and Keller, we find no teaching or discussion of the use of a house advantage within a predetermined range or as a range rather than as a singular value. Again, the examiner maintains that casino games are known to have a house percentage within a predetermined range and that the total prizes awarded would not be greater than the total amount of monies received at the play of the game. (Answer at page 17.) Here again, we cannot agree with the examiner that the house advantage must necessarily have been a variable quantity that is within a predetermined range having set limits based on the correctness of the

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answers and the wager, as recited in the language of independent claim 1. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent within the teachings of Evans. Accordingly, we cannot sustain the rejection of independent claim 1 and dependent claims 3 and 18 based upon the teachings of Evans since Evans does not teach all of the claimed limitations.

**35 U.S.C. § 103**

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. See *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See *In re Lintner*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is *prima facie* obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of

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doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See **In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert. denied**, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. See, e.g., **Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 999-1000, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." *In re Hiniker Co.*, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the limitations in dependent claims 8, 9 and 10 and independent claims 19 and 25. The examiner continues to maintain that the house advantage is "inherent" in casino games and that the setting of the house advantage as in the dependent claims is an obvious matter of design choice. (Answer at pages 5 and 6 with respect to the anticipation and page 8.) While the examiner has based the rejection under 35 U.S.C. § 103, the examiner continues to maintain that house advantage is inherent and the specific setting of the house advantage is an obvious matter of design choice. We again maintain that the house advantage is not inherent, but may or may not be deemed to be an obvious design consideration as also advanced by the examiner. Yet, we do not find any discussion of having the house advantage as a variable quantity within a set range of predetermined values. Therefore, we cannot sustain the rejection of independent claims 19 and 25 since the examiner relies upon the same bases for the rejection as discussed above with respect to the rejections under 35 U.S.C. § 102 which are not resolved or addressed by the examiner's addition of the teachings of Thompson and an attempt to invoke the additional facts which are common knowledge and elements of design in the modification of the base teachings. Accordingly, we do not find that the examiner has established a *prima facie* case of obviousness, and we cannot sustain

the rejection of independent claims 19 and 25 and their respective dependent claims 24, and 30 along with dependent claims 8-10 which depend from independent claim 1.

### **NEW GROUNDS OF REJECTION**

Claims 1, 3, and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over Walker in view of the teachings of Vancura, Martinez, or Kilby.

In determining novelty, the first inquiry must be into exactly what the claims define. *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Similarly, a section 103 analysis begins with a key legal question -- what is the invention claimed? *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987).

Here, the name of the game is the claim. We look to the language of independent claim 1 and find that the relevant limitation is "playing a knowledge-based bonus game using answers from a player in combination with the underlying game of chance, the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range." Here, we find that the limitation as to the game being played and the house advantage therein is akin to an intended field of use preamble which is not realized by the remainder of the claim. In independent claim 1 there is no limitation as to what the range is or that the house advantage is variable and maintained within the range as disclosed in the specification at page 4, lines 18-22. There it states that the:

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knowledge-based bonus games . . . are designed to maintain the house advantage in a range from when all answers to all queries in the knowledge-based bonus game are always correct from the player to the other extreme when all answers to all queries in the knowledge-based bonus game are always being guessed at by the player.

In the instant claim language, we find that the claim may reasonably be interpreted to have a house advantage that is always the same and that the value would necessarily be within the range of 0.00000001 to 100 since every set value is within a set range of possible values. Here, we find that independent claim 1 is very broad.

While we agreed with appellant that the teachings of Keller and Evans do not necessarily and inherently teach a casino game with a house advantage within a predetermined range, we do agree with the examiner's conclusions therewith that it would have been obvious to one of ordinary skill in the art at the time of the invention that skilled artisans would have made it one of the major design criteria to assure that there is worst case house advantage that is profitable. And that this value would necessarily be within a predetermined range or a set value.

While not what appellant may have intended the claim interpretation to be, we do not find the above interpretation to be an unreasonable interpretation in light of appellant's broad claim language. Moreover, the instant independent claim does not require that there be any payout, or how the two games are combined, or how the answers from the knowledge-based bonus game are used with the underlying game of chance. We find that independent claim 1 is very broad.



With this said, we find that Walker teaches the use of a trivia game (knowledge-based bonus game) in combination with a slot machine for use in a casino. (Walker at col. 1 and abstract.) Walker discloses that the questions for the trivia game are obtained from a remote location, we find no requirement in the language of independent claim 1 which would preclude this remote access. Walker discloses in Fig. 9 a table/payout database 900 having the schedule for payout for the combined game of chance and the knowledge-based bonus game. (Walker at col. 6.) Walker also discloses an enhanced payout database 1000. Walker discloses the corresponding method for playing the combined game at columns 6-7 and states that "[b]ased on the identified slot outcome, as well as the player's answer to the trivia question, the CPU 310 locates the appropriate payout in one or more stored payout tables 900, 1000, based on the current reward level." Therefore, we find that Walker teaches the claimed invention, but for "the combined knowledge-based bonus game with the underlying game of chance having a house advantage within a predetermined range." Clearly, we find that it would have been obvious to one of ordinary skill in the art at the time of the invention for the casino to attempt to make a profit or at least make sufficient revenue for the gambling machines and games so as to pay its overhead costs. Therefore, we find that it would have been one of the paramount design considerations in formulating the payout tables of Walker to have allotted the payouts in the table so as to give the house an advantage of at least a predetermined amount or set value taking into consideration the worst case scenario if nothing else.

As evidence of the above concept of house advantage, we rely upon the individual teaching of Vancura, Martinez, or Kilby which the examiner has appended to the answer. Each of these references teaches the basic operational concepts of the casino and casino games and the need for the generation of an advantage to the house so as to generate operational income and a profit.

With respect to dependent claim 3, Walker teaches various alternative embodiments of the combined casino game where the two games are interleaved and where the two games are played sequentially. (See Walker at col. 11, line 15.) Therefore, we find that the combined teachings would have fairly suggested the invention as recited in dependent claim 3.

With respect to dependent claim 9, as discussed above, we find that the skilled artisan would have at least taken into consideration all trivia questions being answered correctly so as to give the house an advantage of at least a predetermined amount or set value taking into consideration the worst case scenario if nothing else. Therefore, we find that the combined teachings would have fairly suggested the invention as recited in dependent claim 9.

We have rejected independent claim 1 and dependent claims 3 and 9 as examples of the breadth of appellant's claims and the appropriateness of a rejection based upon obviousness rather than anticipation as made by the examiner. We leave it to the examiner to further evaluate the remainder of the claims and extend the rejection as is deemed appropriate.

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This decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 CFR § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a) (1) (iv).


#### CONCLUSION


To summarize, the decision of the examiner to reject claims under 35 U.S.C. § 112, FIRST PARAGRAPH is reversed, the decision of the examiner to reject claims under 35 U.S.C. § 112, SECOND PARAGRAPH is reversed, the decision of the examiner to reject claims under 35 U.S.C. § 102 is reversed, and the decision of the

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examiner to reject claims under 35 U.S.C. § 103 is reversed. We have rejected claims  
1, 3 and 9 under 35 U.S.C. § 103 under the authority under 37 CFR 41.50(b).

**REVERSED**

  
JOSEPH F. RUGGIERO  
Administrative Patent Judge

  
JOSEPH L. DIXON  
Administrative Patent Judge

  
STUART S. LEVY  
Administrative Patent Judge

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Appeal No. 2005-1374  
Application No. 09/875,753

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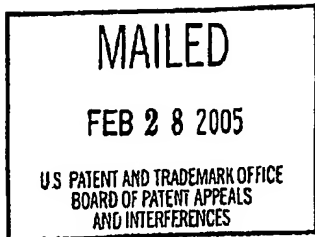


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 41

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES



Ex parte OLAF VANCURA

Appeal No. 2004-0357  
Application No. 09/372,560

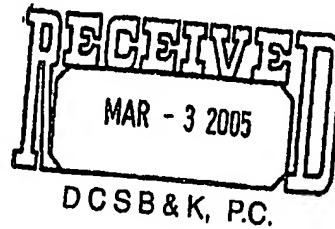
ON BRIEF

Before RUGGIERO, DIXON, and LEVY, Administrative Patent Judges.  
DIXON, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 2, 4-30, 42-47, 49-55, 57, 58, and 130-132, which are all of the claims pending in this application.

We REVERSE.



## BACKGROUND

The Appellant's invention relates to a knowledge-based casino game and method therefor. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A method for playing a casino game comprising:

receiving a wager for the casino game,

playing an underlying game of chance in the casino game,

awarding payoffs when play of the underlying game of chance results in a winning combination,

playing a knowledge-based bonus game in the casino game using answers from a player when a bonus condition occurs in the underlying game, playing the knowledge-based game after playing the game of chance without any intervening game which would affect the payoff of the game of chance, the play of the knowledge-based game having a bonus payoff separate from the payoffs awarded in the play of the underlying game of chance so that the entitled payoffs are made for the underlying game regardless of the outcome of the knowledge-based game, the combined play of both the knowledge-based bonus game with the underlying game of chance over time having a house advantage for the casino game within a predetermined range, the predetermined range having set limits based on the correctness of the answers and the wager.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Thompson	5,178,545	Jan. 12, 1993
Keller, Jr. (Keller)	5,718,429	Feb. 17, 1998
Walker et al. (Walker)	6,193,606	Feb. 27, 2001
		(Filed Jun. 30, 1997)

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Evans	GB 2,197,974	Jun. 02, 1988
Claypole et al. (Claypole)	GB 2,262,642	Jun. 23, 1993

Claims 1, 2, 4-30, 42-47,<sup>1</sup> 49-55, 57, and 58 stand rejected under 35 U.S.C. § 102 as being anticipated by Walker. Claims 1, 2, 4, 9-30, 42-47, 49-55, 57, and 58 stand rejected under 35 U.S.C. § 102 as being anticipated by Claypole. Claims 1, 2, 4-7, 12, 13, 18, 42-46, 50, 55, 57, and 58 stand rejected under 35 U.S.C. § 102 as being anticipated by either Keller or, in the alternative, Evans. Claims 8-11, 14-17, 19-30, 47, 49, 51-54, 56, and 58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over either Keller or, in the alternative, Evans in view of Thompson. Claims 130-132 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Walker, Claypole, Keller or Evans in view of matters well known to mathematics and gaming.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 35, mailed May 16, 2003) for the examiner's reasoning in support of the rejections, and to appellant's brief (Paper No. 33, filed Feb. 24, 2003) and reply brief (Paper No. 36, filed Jul. 10, 2003) for appellant's arguments thereagainst.

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<sup>1</sup>We note that claim 47 remains on appeal, but has not been included in the appendix.



### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

In determining novelty, the first inquiry must be into exactly what the claims define. *In re Wilder*, 429 F.2d 447, 450, 166 USPQ 545, 548 (CCPA 1970). Similarly, a Section 103 analysis begins with a key legal question -- what is the invention claimed? *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987).

As our reviewing court states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002), cert. denied, 123 S.Ct. 2230(2003).

A patent is invalid for anticipation when the same device or method, having all of the elements contained in the claim limitations, is described in a single prior art reference. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 Fed. Cir.

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1989); **Perkin-Elmer Corp. v. Computervision Corp.**, 732 F.2d 888, 894, 221 USPQ 669, 673 (Fed. Cir. 1984). An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention. See **In re Spada**, 911 F.2d 705, 708, 15 USPQ 1655, 1657 (Fed. Cir. 1990); **Diversitech Corp. v. Century Steps, Inc.**, 850 F.2d 675, 678, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

The novel aspects of the invention must be disclosed and not left to inference, that is, a patentee may not rely on the inference of a person of ordinary skill in the pertinent art to supply such novel aspects. See **Genentech Inc. v. Novo Nordisk A/S**, 108 F.3d 1361, 1366, 42 USPQ2d 1001, 1005 (Fed. Cir. 1997) (stating that the knowledge of a hypothetical person of ordinary skill in the art cannot be used to supply the patentable aspects of the invention).

"Deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense.'" **In re Zurko**, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Furthermore, "the Board's findings must extend to all material facts and must be documented on the record, lest the 'haze of so-called expertise' acquire insulation from accountability." **In re Lee**, 277 F.3d 1338,

1345, 61 USPQ2d 1430, 1435 (Fed. Cir. 2002). Here, we find the Examiner's arguments to be supported merely by the Examiner's own expertise instead of the evidence of record and the teachings of prior art which are required in order to establish a *prima facie* case of anticipation. Accordingly, we do not sustain the 35 U.S.C. §§ 102 and 103 rejections of any of claims. A discussion of the applied prior art is below

**35 U.S.C. § 102**

**WALKER**

While Walker teaches a combination of a slot machine and a trivia game with the ability to access higher rewards (Walker abstract), we find that Walker does not teach the use of two payoffs as required by the language of all of the independent claims. Walker teaches that the payoff from the game of chance is either raised or reduced based upon a correct or incorrect answer to the trivia question. Therefore, Walker teaches a single payoff. Additionally, we find that the spinning of the reels each iteration of the game of chance would not amount to the occurrence of a bonus condition after the game of chance to initiate the game of skill.

From our review of the teachings of Walker, we find that Figure 10 teaches that the house advantage or the payoff would vary. Therefore, we find that the payoff would be variable for the game of chance and would be different for the combination of the

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game of chance with the trivia game. Therefore, there would have been a range of house advantages since it would change for different levels of participation.

We find that the examiner makes one material error with respect to "casino games" that these games of chance all have a consideration of house percentage and that it is "rudimentary to the design of wagering games." (Answer at page 6.) While it is true that house percentage is essential to the financial well being of a casino, we do not find that all machines and games must "necessarily" have a positive house advantage since some machines are used as noise makers and used as attractions rather than as moneymakers. While we can agree that house advantage is a consideration, we cannot agree with the examiner that the house advantage would be within a predetermined range and that range would have set limits based on the correctness of the answers and the wager as recited in independent claim 1. Therefore, we cannot sustain the rejection of independent claims 1, 19, 25 and 42 and their dependent claims based on Walker.

Additionally, we note that the examiner has argued throughout the prosecution that many of the features of the claimed invention are old and well known or known in the art, but we note that one of the requirements to support a rejection under 35 U.S.C. § 102 is that a single prior art reference must teach or disclose the totality of the

claimed invention. Therefore, the mere fact that certain facts were old and well known is not sufficient to support a finding of anticipation unless those additional facts or features MUST NECESSARILY have been present in the applied reference.

Additionally, the examiner cites "Smart Casino Gambling," by Olaf Vancura that "almost all games enjoy[s] a positive expectation" to support a finding that the house advantage was known and present. Here, we agree with the quotation that almost all games enjoy a positive house advantage, but not all. Therefore, we find that it need not be inherent, but may or may not be obvious that it is desirable to have a positive house advantage in all casino games. We make no determination thereto.

#### CLAYPOLE

While Claypole teaches the use of game of skill, such as a quiz game, (Claypole at pages 3, 4, and 7), Claypole does not specifically address that the outcome of the combination of game of chance and game of skill would have separate payoffs. (Reply brief at pages 14-15.) From our review of the teachings of Claypole, we find no clear discussion that there are two separate payoffs for the two portions of the combined game. The examiner maintains that Claypole teaches the separate payoffs by the discussion of the player using the collect button. (Answer at page 10, Claypole at page 12.) While this shows the ability to collect the winnings from the

game of chance, there is no discussion of how the payoff of the trivia or quiz game would be made and what the wager would be.

From our review of the Claypole reference, we find that Claypole is silent as to the payoffs and the house advantage. We find Claypole to be a general teaching of multiple variations on combined games with little detail thereto. The examiner again maintains that it would be inherent that the house advantage would have been present. The examiner maintains that evidence attached to the answer shows "the tendency and ability of one skilled in the art to consider the house percentage when designing a casino game." (Answer at page 10.) We agree with the examiner in general, but find no teaching within the reference with respect to the house advantage being any more than a singular value. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent within the teachings of Claypole. Accordingly, we cannot sustain the rejection of the independent claims based upon the teachings of Claypole since Claypole does not teach all of the claimed limitations.

#### **KELLER**

Keller teaches the combination of the game of chance tied by the use of a payoff of an non-monetary token which may only be used to obtain access to a physical or mental game of skill. If the player is successful in the game of skill, the individual is

awarded a prize based upon the indicium on their token. Here, we agree with appellant that the Keller game combination is more of a combination for entertainment in areas with limited ability to play games of chance for monetary gain. (Brief at pages 18 and 19.) Appellant argues that there is no bonus condition in the game of chance. (Brief at page 19.) While we agree with appellant concerning the payoff from the game of chance in Keller, we find no limitation on what the payoff of the game of chance must be. Here Keller has two separate and different payoffs and the winning token in the game of chance must be used as an entry into the game of skill. Therefore, Keller teaches the use of two payoffs, but requires that first payoff to be used to enter the game of skill. While it is not the same as in appellant's disclosed method, we agree with the examiner that it is sufficient to meet the limits of the independent claim 1. (Answer at page 10.)

What we do not find is any discussion of house advantage in the teachings of Keller. Again, the examiner maintains that one skilled in the art would have recognized that the casino game of Keller would be profit driven and the house advantage is considered to inherently have a house advantage within a predetermined range. (Answer at page 11.) Again, we agree with appellant that the examiner has gone beyond the express disclosure of Keller and made assumptions which do not have to necessarily occur. Here, the examiner does not identify why the house advantage would have been a range rather than a singular value. Therefore, we cannot agree with

the examiner that the claimed house advantage would have been inherent within the teachings of Keller. Accordingly, we cannot sustain the rejection of independent claims 1 and 42 based upon the teachings of Keller since Keller does not teach all of the claimed limitations.

### **EVANS**

Appellant argues that Evans does not teach the use of two separate payoffs. (Brief at page 21.) We agree with appellant that Evans teaches the use of a game of chance to establish what payoff may be achieved by the subsequent play of a game of skill. Therefore, we agree with appellant's argument at page 21 of the brief that Evans does not provide two separate payoffs. Furthermore, we do not find the occurrence of a bonus condition in the play of the game of chance for the chance to play the game of skill. Here, the examiner seems to maintain that each play of the game of chance would have resulted in a bonus condition. Again, we find this to be an unreasonable interpretation of appellant's claim limitation.

Again, as with the teachings of Walker, Claypole and Keller, we find no teaching or discussion of the use of a house advantage as a range rather than as a singular value. Again, the examiner maintains that casino games are known to have "a house percentage within a 'predetermined range'" (answer at page 11) and that the issue has



been "beal to death throughout the answer." Here again, we cannot agree with the examiner that the house advantage must necessarily be a variable quantity that is within a predetermined range having set limits based on the correctness of the answers and the wager, as recited in the language of independent claims 1 and 42. Therefore, we cannot agree with the examiner that the claimed house advantage would have been inherent within the teachings of Evans. Accordingly, we cannot sustain the rejection of independent claims 1 and 42 based upon the teachings of Evans since Evans does not teach all of the claimed limitations.

**35 U.S.C. § 103**

With respect to independent claims 19 and 25, the examiner maintains that the house advantage is "inherent in casino games." (Answer at page 13.) While the examiner has based the rejection under 35 U.S.C. § 103, the examiner continues to maintain that house advantage is inherent. We again maintain that the house advantage is not inherent, but may or may not be deemed to be an obvious design consideration as also advanced by the examiner. (Answer at pages 11-13.) Yet, we do not find any discussion of having the house advantage as a variable quantity within a set range of predetermined values. Therefore, we cannot sustain the rejection of independent claims 19 and 25 since the examiner relies upon the same bases for the rejection as discussed above with respect to the rejections under 35 U.S.C. § 102

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Application No. 09/372,560

which are not resolved or addressed by the examiner's addition of the teachings of Thompson and an attempt to invoke the additional facts which are common knowledge and elements of design in the modification of the base teachings. Accordingly, we do not find that the examiner has established a *prima facie* case of obviousness, and we cannot sustain the rejection of independent claims 19 and 25 and their respective dependent claims 20-24, and 26-30.

With respect to dependent claims 8-11, 14-17, 47, 49, 51-54, 56, and 58, we do not find that the teachings of Thompson remedy the deficiencies in Keller and Evans. Therefore, we will not sustain the rejection of claims 8-11, 14-17, 47, 49, 51-54, 56, and 58.

With respect to dependent claims 130-132, we cannot agree with the examiner that the mathematics of each well-known game are considered synergistic and that it would have been obvious to one skilled in the art to design the game to achieve the claimed house percentage since the examiner has not shown why it would have been obvious to one of ordinary skill in the art at the time of the invention to have the house advantage set as a range of values rather than as a singular value. Therefore, we cannot sustain the rejection of dependent claims over Walker, Claypole, Keller and Evans in view of known mathematics and gaming.

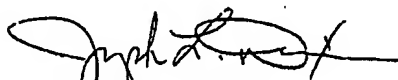
Appeal No. 2004-0357  
Application No. 09/372,560

### CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 2, 4-30, 42-47, 49-55, 57, and 58 under 35 U.S.C. § 102 is reversed, and the decision of the examiner to reject claims 8-11, 14-17, 19-30, 47, 49, 51-54, 56, 58 and 130-132 under 35 U.S.C. § 103 is reversed.

### REVERSED

  
JOSEPH F. RUGGIERO  
Administrative Patent Judge

  
JOSEPH L. DIXON  
Administrative Patent Judge

  
STUART S. LEVY  
Administrative Patent Judge

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Appeal No. 2004-0357  
Application No. 09/372,560

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